

# FLIGHT

The  
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AND AIRSHIPS

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## EDITORIAL COMMENT



LYING meetings by clubs in all parts of the country now follow each other so fast that it is not easy to keep track of them all. Last Saturday there was a particularly attractive display at Brooklands, in the course of which Mr. C. W. A. Scott was officially welcomed by the Minister for Air and

was congratulated on his double record between England and Australia. Other features of first-class interest were a wonderful display by Mr. Sayer in the "Fury" and a demonstration of the Autogiro by Mr. Brie. Most of the other events were what might be called the usual stock items of a civil flying display, namely, a parade of various types on the ground and in the air, with aerobatics and formation flying in light aeroplanes. It is with these stock events that we are concerned at the moment, but our remarks must not be taken as criticisms of the Brooklands organisation in particular, but of the accepted policy of civil air displays in general.

### Civil Air Displays

It seems to us that the time has come when these club meetings should adopt a regular policy in framing their programmes. In the first place, there is evidence that the public is beginning to reach a stage of air-mindedness at which it shows signs of boredom at ordinary flying and ordinary aerobatics. At any rate the time cannot be far distant when the majority of British citizens will have seen as many loops and spins as they care to watch. In the second place, these flying displays might be made a valuable medium of air propaganda, a function which at present they hardly perform. Each flying club must want the public in its district to take a keen interest in flying and to believe in it as a good thing and a coming means of transport. If flying bears a good local reputation, that must make for profits for the club. So, if we venture to make suggestions, we do so in the belief that these suggestions are for the benefit of the individual club as well as for the general cause of flying.

### DIARY OF CURRENT AND FORTHCOMING EVENTS

Club Secretaries and others desirous of announcing the dates of important fixtures are invited to send particulars for inclusion in this list:—

1931  
June 13. May Week Meeting, Marshall's School, Cambridge.  
June 13. Close of Royal Tournament at Olympia.  
June 13-14. Leicestershire Ae.C. "At Home" at Desford.  
June 18. R.A.F. Flying Display and Polo Gymkhana at Halton.  
June 19. Flying Display, Andover.  
June 20. Flying Display, Bristol Airport S.B.A.C. Cup Race.  
June 20. Opening of Flying School at Barton (Manchester).  
June 21. N.F.S. Air Pageant, Reading.  
June 22. Entries Close for King's Cup Race.  
June 26. R.A.F. Dinner Club Annual Dinner, Connaught Rooms.  
June 27. Royal Air Force Display, Hendon.  
July 4. T.M.A.C., 3rd Wing, Inaugural Meeting, Stag Lane Aerodrome.  
July 4-6-7. Cricket. R.A.F. v. Army at the Oval.  
July 10-19. Circuit of Italy.  
July 15-16. Cricket. R.A.F. v. Civil Service at Uxbridge.  
July 22. Household Brigade Flying Club Meeting, Heston.  
July 25. King's Cup Race.  
July 25-Aug. 9. Rhon Gliding Competitions, Germany.  
July 27-28. Cricket. R.A.F. v. Free Foresters at Camberley.  
Aug. 1-2-3. Southdown Skysailing Club's Annual Flying Meeting.  
Aug. 3-4. Cricket. R.A.F. v. R.N. at Halton.  
Aug. 15. Manchester-Liverpool Inter-City Race.  
Aug. 22. Newcastle-on-Tyne Meeting.  
Aug. 29. Norfolk and Norwich Club Meeting at Yarmouth.  
Sept. 5. Haldon Flying Meeting.  
Sept. 12. Schneider Trophy Contest.  
Sept. 26. Garden Party, Bristol and Wessex Ae.C.  
1932.  
May 31. Closing date for Cellon Cross-Channel Glide £1,000 Prize.

The organisers of the meetings must already be racking their brains to find variations of the programme. If they are not fortunate enough to stage the arrival of a popular hero or a demonstration by a "Fury" or an Autogiro, the only idea seems to be to arrange for more aerobatics, and still more aerobatics. Every machine which goes into the air must, it appears, be looped and rolled. There may be some point in a Martlesham pilot proving that a freight-carrier can be looped, but there can be no possible point in making it perform aerobatics before the public. A freight-carrier is for carrying freight, and it will never be looped when flying on its lawful occasions. If a number of different types of light aeroplanes are shown, first in a parade on the ground and then in a fly-past, and each one does some loops, the public learns nothing of the points of each machine but is apt to get bored by the sight. The point about an Autogiro is not its manoeuvrability, but its ability to land and take off with a minimum of run. Again, there is not much object in having an ambulance aeroplane in the display if all that the public is allowed to see is the Red Cross painted on its fuselage. Such instances might be multiplied.

Our suggestion is that the programme at flying meetings should be arranged so as to give the public some clear idea of the purpose for which each different type has been designed. The meeting should show off the selling points of each type, and serve as a guide to prospective private owners, as well as giving the general public some ocular instruction in the progress of aeronautics and the ideas upon which our designers are working. In doing this, a great deal will depend upon the announcer, and a really first-class announcer should be worth his weight in gold to the organisers of a meeting. Notes on the printed programme are useful, and the Brooklands programme did good work in printing the price of each machine which was on view. But everybody does not read programmes. If they see the machine doing the work for which it was intended they will carry away a clear impression which will not readily be forgotten.

Let us suppose that one of the machines at the meeting is a medium-sized cabin machine, remarkable for its internal comfort and roominess. It should not be difficult to stage a little story to illustrate this. For instance, a football XI in muddy shorts and jerseys might embark in it and fly off to an imaginary civic reception. When the machine lands they would emerge dressed in their Sunday best, and be greeted by the supposed Mayor of their native city. If a Red Cross aeroplane is shown, then the victim of an accident might be brought out of a motor ambulance, lifted into the cabin of the aeroplane and flown off to hospital. When the stage is held by a freight-carrier, it would be easy to bring it into a prominent position in front of the spectators and there take packages on board, each clearly

marked with its weight. When the machine flies round, "going through the motions" (as the sergeant-major says) of journeying to Darwin, it should fly very steadily, and not indulge in loops and rolls.

When a number of light aeroplanes are displayed, it would be a very useful thing if the announcer would emphasise the selling points of each. The man on the aerodrome who is not thinking of learning to fly himself, but who wants to take an intelligent interest in the matter, should be an object for propaganda. He may learn of an aeroplane which would just make it possible for a friend of his to take a ticket and become a private owner. If this man reads his programme and sees that the landing speed of a certain machine is 60 and that it has independent wheel brakes, these words convey very little to him. But if the announcer explains these points, and the pilot then gives a practical demonstration of their advantages, the lesson will be driven home. A loop by the said machine as it flies round will not add anything to its attractions. There are quite a number of people whose gymnasium days are long past and who greatly dislike the idea of being turned upside down. Some of them would like to experience a flight, but they get the idea that if one goes up one is sure to be "chucked about." Acrobatics and aerobatics are for those whose glands are still youthful and who know not the meaning of blood-pressure.

We are not depreciating aerobatics in the right place and in the right machine. When the organisers of the display are fortunate enough to secure the presence of a "Fury," by all means let it show off its powers. The R.A.F. Display at Hendon would not be the popular event which it is without very good aerobatic displays. The announcer must repeat *ad nauseam* that the public is not able to buy pleasure flights in a single-seater fighter. The distinction between civil flying and service flying should be driven home whenever opportunity occurs. We cannot remember all the occasions on which we have heard well-educated newspaper readers lump all the accidents of a year together and proclaim that flying is still very dangerous. When one points out that 80 per cent. of those accidents were service accidents, 20 per cent. addle-pated private owners stunting too near the ground, and 0 per cent. regular air lines, the said intelligent readers say "Oh! of course; I forgot," in a surprised tone, and remember the lesson until next time. These distinctions need constant repetition if they are to be absorbed, and a civil air display, with machines to be seen and the announcer to be heard, should be a very suitable occasion for driving the lesson home. But if such displays are to have a real educative effect, for the benefit of the clubs, the manufacturers, and the travelling public alike, a well-thought-out policy is necessary in drawing up the list of events.





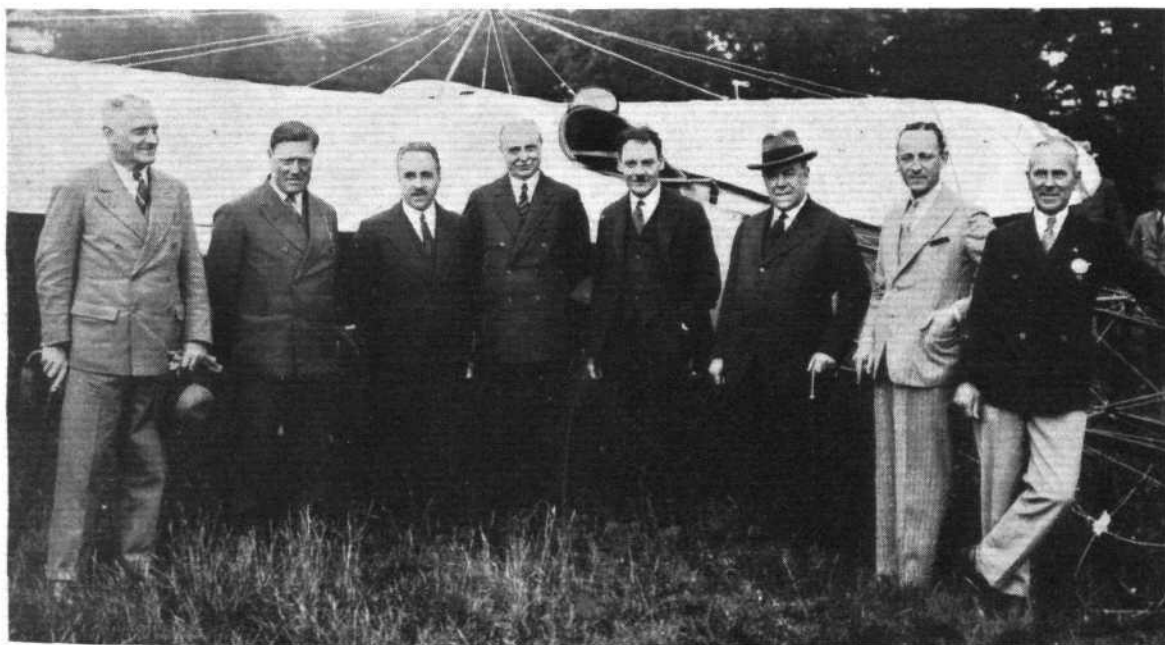
**An unusual touch was lent to the Parliamentary visit to Hanworth by the presence of a replica of the old Bleriot monoplane, Type XI, and the latest commercial aircraft, the Handley Page "Hannibal." Many of the visitors saw, for the first time, a Bleriot monoplane in flight**

**T**HAT was quite a happy idea of National Flying Services to invite members of the House of Commons and House of Lords to Hanworth for an afternoon's air-mindedness-making. Colonel the Master of Sempill was in charge of the organisation, and as usual he was here, there and everywhere—seemingly at the same time. Colonel Sempill's energy is unbelievable, and how he finds the time to do all he does do is something of a mystery. That, in spite of his busyness, he always finds time for a chat and a friendly word with everybody, is not only proof of that tact for which he became famous while he was chairman of the Royal Aeronautical Society, but of nerves under perfect control. On Saturday the loud-speaker equipment at Hanworth broke down, and Colonel Sempill had to add the rôle of megaphone man to all his other activities. Yet he remained unruffled as ever. That some of the items on the programme had to be transposed was no fault of the organisers, but due to the non-arrival of some of the "performers," and one of the charms of

the afternoon's garden party was its total lack of formality. Everyone "took it easy," nothing was treated with too much seriousness, and the result was that the afternoon was an entirely enjoyable one.

The Handley Page "Hannibal" (Eastern Type) floated in very early in the afternoon, piloted by Major Brackley and Captain Walters, and was parked in front of the enclosures, with its proboscis close to a flagstaff. As the machine is not fitted with reversible engines, and as there was nothing at Hanworth powerful enough to haul it backwards, the aforementioned flagstaff had to be lowered in the evening before the "Hannibal" could get away.

Lined up along and around the enclosures were large numbers of aircraft, many carrying the well-known N.F.S. colours, but as many being privately-owned machines of every known type: Avians, Bluebirds, Desoutters, Gipsy-Moths, Puss Moths, Martlets, Redwings, Spartans, and so forth. The military side was represented by a Bristol Bulldog (Jupiter) single-seater fighter and an Armstrong Whitworth "Atlas" Mark II fitted with Armstrong



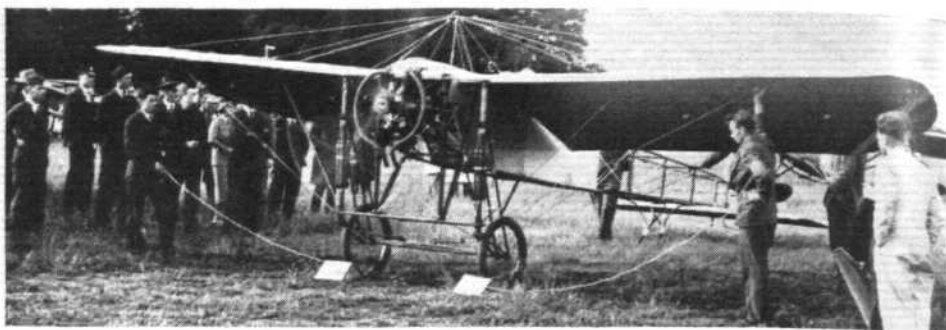
**PIONEERS AT HANWORTH:** With M. Bleriot and Mr. Montague in this group are a number of old-timers who have flown the early Bleriot machines. From left to right: Group Captain E. F. Briggs, D.S.O., O.B.E., M. Quatremarre, who flew the Bleriot at Hanworth, M. Marcel Desoutter, M. Louis Bleriot, Mr. Marcus D. Manton, Mr. Montague, Under-Secretary of State for Air, Wing-Commander R. L. G. Marix, D.S.O., and Sir Alliot Verdon Roe. (FLIGHT Photo.)



Siddeley Panther engine. This machine has been fitted with wings of Clark YH section, and these certainly seem to have caused a considerable improvement in the machine, judging by the way in which, during a flight in the afternoon, Mr. Campbell Orde crawled along at very low speed under perfect control.

What is probably the first British Red Cross aeroplane, a Desoutter monoplane with Hermes engine, was also on view. This has a very comfortable-looking bed for a "stretcher case," and shows that we in this country can also, when we make up our minds, make a very good *avion sanitaire*; a type of machine in which France has hitherto excelled.

By way of opening the proceedings, Mr. Lowe Wylde was towed into the air by a motor car, and made a very pretty flight, with S-turns, etc. It is quite uncanny suddenly to see a glider sliding noiselessly overhead, and one cannot at first get accustomed to the idea that it is losing height very slowly. Consequently one is in a state



**AN OLD-TIMER:** A replica of a Bleriot monoplane, type XI, which was flown at Hanworth by M. Quatremarre. (FLIGHT Photo.)

of apprehension at the manner in which the pilot seems to have "forgotten" that he has no engine, and circles about with, apparently, no time or room to make a safe landing. Yet Mr. Lowe Wylde (who on this occasion was carrying a lady passenger) found time to make several S-turns low down and still land well away from the aerodrome boundary. It was a very pretty exhibition.

In the meantime a Westland "Wessex" (3 Genet Majors), piloted by Mr. Penrose, arrived carrying a full complement of Westlanders, including Sir Ernest Petter, Mr. Bruce and Captain Keep. This latest "Wessex" looks remarkably well, and the cabin arrangement is very comfortable. One learned with relief that Mr. Paget, who crashed on a Widgeon recently, is progressing very well.

An Air Union "Rayon d'Or" Liore & Olivier biplane came over with a party of French visitors to greet M. and Mme. Bleriot, who were already at Hanworth.

The first "official" part of the programme was the arrival in formation of the machines of No. 600 City of London Bomber Squadron from Hendon. Mounted on Westland "Wapitis"

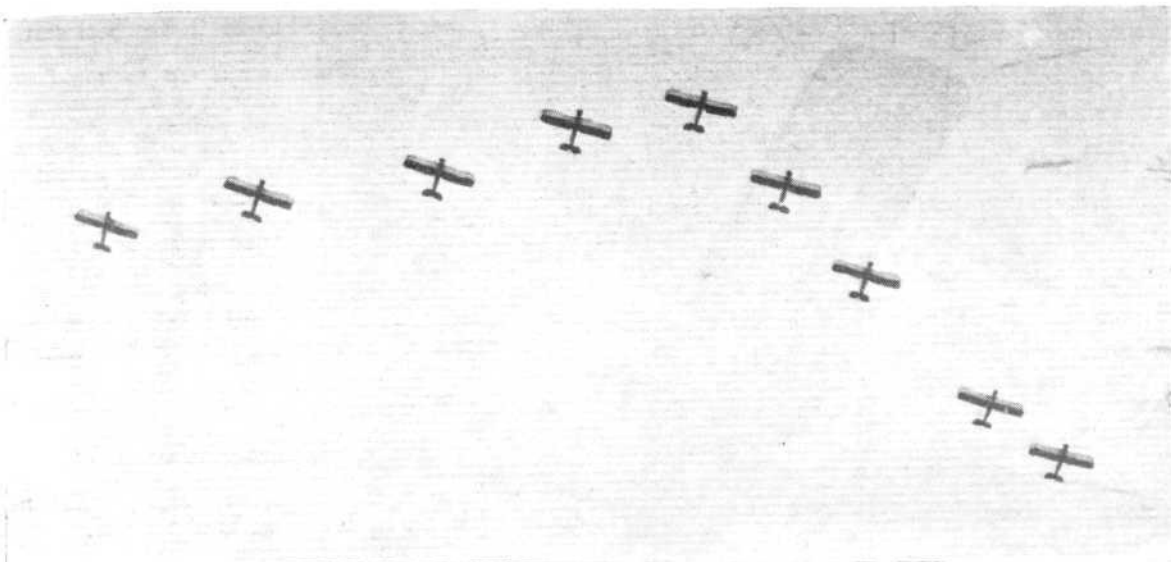


**A PROMISING NEWCOMER:** The Monospar machine, with two 45 h.p. Salmson engines, is an experimental type with many interesting features. It was demonstrated at Hanworth by Sqd. Ldr. Rollo Haig. (FLIGHT Photo.)



**HANWORTH FROM THE AIR:** In the foreground is seen the "Hannibal," and next to it the old Bleriot monoplane. (FLIGHT Photo.)





**IN SQUADRON VEE FORMATION:** No. 600 City of London Bomber Squadron flying over Hanworth. (FLIGHT Photo.)

(Bristol Jupiters) Captain Guest's squadron flew across repeatedly in various formations, such as squadron Vee and line abreast, and in view of the bumpy weather the station-keeping was very good indeed.

One or two items having missed fire owing to non-arrival from Brooklands, where a large meeting was held on the same day, Mr. Cyril F. Uwins, Bristol's chief test pilot, stepped into the breach and gave a very pretty exhibition of aerobatics on the "Bulldog." One of the most attractive features of the display was that Uwins did his evolutions at a safe height, with the result that one could thoroughly enjoy the really "finished" flying without that nervousness which stunting close to the ground is apt to engender in many onlookers. Slow rolls, and part of an inverted loop, were among the evolutions carried out.

Mr. Campbell Orde, Armstrong Whitworth's chief test pilot, came next on the "Atlas." The machine has but recently left the shops, and still requires a little tuning up. Consequently Campbell Orde did not indulge in any of the more fanciful forms of stunting, but his slow-flying demonstrations were very convincing, even allowing for the fairly strong wind which was blowing at the time. The fitting of wings of CYH section seems to have resulted



**FIRST BRITISH "AVION SANITAIRE":** A Desoutter monoplane (Hermes) has been fitted up as a Red Cross machine. (FLIGHT Photo.)

in quite an improvement, and even at very low speeds there were no signs of the "Atlas" having a tendency to "fall out of the pilot's hands." On the contrary it seemed to be under perfect control.

Mr. Brie came over from Brooklands on an Autogiro (Genet), and gave a really excellent demonstration of what that machine can do. The exhibition was, to our way of thinking, just the kind that is wanted. Instead of trying to emulate orthodox types of aircraft by manoeuvres for which, even if capable of doing them, the Autogiro was never intended, Mr. Brie "sat still" above the edge of

the enclosure, then descended slowly and nearly vertically, landing quite close to the aerodrome boundary. Then, before the rotor had time to slow down, he opened his engine and took off with practically no run, climbing steeply and getting over the fence and trees at the edge of the aerodrome in fine style. That was something which no other aircraft could have done, and showed plainly to those with enough knowledge to appreciate the demonstration, how the autogiro can be landed in and taken off from a very restricted space, even when trees are in the way.

In the meantime M. Blériot had been flown across to Brooklands in a Desoutter monoplane to be introduced to Lord Amulree, the Secretary of State for Air. He returned at approximately the same time as Mr.



**A MILITARY REPRESENTATIVE AT HANWORTH:** An Armstrong Whitworth "Atlas" Mark II (Panther engine). This machine has wings of CYH section, and seems to hang in the air remarkably well at low speed. Note the anti-drag engine cowling. (FLIGHT Photo.)



**COMPLETE WITH CERTIFICATE OF AIRWORTHINESS: The Handley Page "Hannibal" (four Jupiters) leaving Hanworth for Croydon. (Flight Photo.)**

Scott arrived from Brooklands in the Gipsy Moth in which he has recently returned from Australia in record time. A very jolly little ceremony was arranged by Colonel Sempill, in which M. Blériot was duly photographed and filmed while shaking hands with a number of people who in the early days of flying had flown his monoplanes. This pleasant little interlude took place by the side of a Blériot monoplane which M. Blériot had been kind enough to have sent over for the occasion. This machine is not a replica of the Cross-Channel model on which M. Blériot made the first flight across the Channel in 1909. In fact, it is not an exact replica of anything. But it is very nearly identical with the type XI which became so extraordinarily popular after the introduction of the 50 h.p. Gnome engine. This particular specimen differed from the type XI in that it had a 6-cylinder Anzani engine (the good old type with automatic inlet valves) of 45 h.p., and the flat steel tapes with which the original XI was braced below had given place to stranded cables. The *cloche* control had given way to a more modern arrangement, although the top of the control stick was the same little old wooden horizontal wheel as the early pilots used to grasp. M. Blériot made a very graceful impromptu speech in French, in which he referred to the progress made and the wonderful establishment which is the modern Hanworth.

During the afternoon there was a steady stream of visitors going through the cabins of the "Hannibal," the luxury of which was much admired. A few thoughtful ones stopped, on their way out, in the cockpit, and a few rather wondered how the pilot is going to operate the engine controls as well as the wheel brake lever while manœuvring on the ground. Both are centrally placed, so that from either seat the pilot has to work in an awkward position, in which he cannot exert very much force. It would seem that it must become normal practice in the "Hannibal" for one pilot

to be in the port seat, ready for the take-off, while the other stands up in the centre of the cockpit and works engine controls and wheel brakes. How this divided responsibility is going to work under certain conditions remains to be seen.

Towards evening Squadron Leader Rollo Haig brought out the Monospar twin-engined monoplane and gave a very fine demonstration of the machine's capabilities. It is true that he was "flying light," but even allowing for this fact, the machine performed remarkably well, its slow-flying being particularly impressive, as was also the demonstration of lateral control which Haig gave by standing the machine first on one wing tip and then on the other, descending at a steep angle, although with the fuselage horizontal, all the while. The speed range seems to be very good, and when the production type, with two of the new Pobjoy engines appears, it should be a very useful four-seater indeed.

Another machine well demonstrated during the day was the Southern Martlet with Genet Flying-Officer Watt, of the Central Flying School, piloted. The manœuvrability of the Martlet is well known, and the slow roll down, immediately following the take-off, was rather unnecessary. Impressive to some, undoubtedly, but scarcely worth the risk involved.

During the day a number of the visitors were taken for flights, and many of the Parliamentary representatives went up in the Air Union LeO biplane. That is how we do things in this country. The "Hannibal" was, presumably, felt to be too new and untried to be used for Parliamentary joy riding, and there was no other British "Giant Air Liner" present.

Mr. Scott, on flying over from Brooklands, was received by Mr. F. Montague, Under-Secretary of State for Air, who congratulated him warmly on being the first



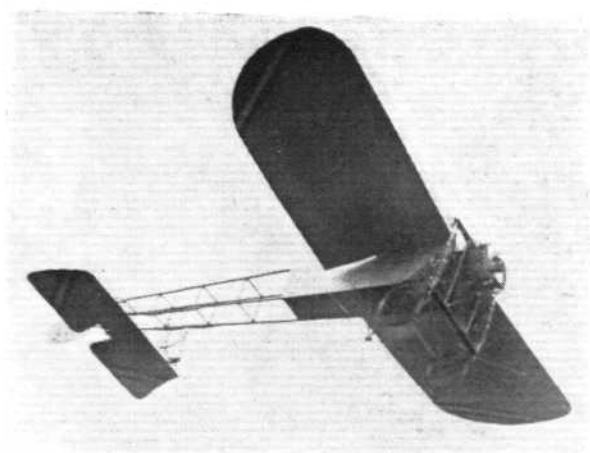
**MODERN COMFORT: The after cabin in the "Hannibal" (Eastern Type). The forward cabin is reached through the corridor seen in the background. (Flight Photo.)**

man to hold both the out and home records for flights between England and Australia.

The *clou* of the day was a circuit of the aerodrome by M. Quatremarre on the Blériot monoplane. It was quite like old times to see helpers wheel the machine out tail first and with the tail high in the air so as to reduce the angle of incidence on the wings. The machine took off with a remarkably short run, and without troubling to gain any great height, M. Quatremarre made a complete right-hand circuit of the aerodrome. The bumpy wind had abated a little by then, but nevertheless one saw something of the flicking of the trailing edge as the pilot used his wing warp, which was such a well-known sight in the old days.

M. Blériot deserves the thanks of a considerable number of people for having given them an opportunity to see in flight a type of machine which made aviation history, and the gratitude of a smaller number for having made it possible for them to re-live for a few moments memories very dear to them.

It is somewhat curious that, even with its complicated undercarriage and the open rear portion of the fuselage,



**BORN 1910 AND STILL GOING STRONG:**  
M. Quatremarre flying the Blériot monoplane at Hanworth. (FLIGHT Photo.)

the Blériot monoplane is still a pretty aircraft; at least, it seems so to those of us who used to admire the machine in the early days of flying, when Hamel on a Blériot provided more regularly and uniformly *pretty* flying than did any other combination. That this was not due to the pilot alone was proved by the fact that, when Hamel took to the Morane-Saulnier monoplane, his flying became less pretty, although possibly more spectacular. It would be interesting to know how the Blériot monoplane impresses the modern generation from the point of view of appearance, and whether the fact that we old-timers still think the machine good-looking, is due to a sentimental regard

for it, without which the prettiness disappears.

Towards the evening a flight of three Redwings appeared, piloted, it was found, by Russell, Paine, and Armour. Their formation was good, and, when they "split up," they did so in a somewhat unusual way, with a sort of horizontal "Prince of Wales Feathers," the leader flying straight ahead, while the two outer machines swung outwards.



**BACK IN RECORD TIME:** Mr. Scott's Gipsy Moth was a great centre of attraction at Hanworth, whither he flew it from Brooklands. (FLIGHT Photo.)

#### A Reception to the Delegates of the I.C.A.N.

THE British Aviation Hospitality Association gave a reception to the delegates who have come to this country for a Convention of the I.C.A.N. at the Park Lane Hotel, on the evening of June 3. The President of the Association, the Viscountess Elibank, had not yet recovered from her unfortunate mishap which resulted in breaking her ankle, and Mrs. Sheldermine, wife of the Director of Civil Aviation, acting as hostess in her stead, received the guests. Many of the prominent aircraft manufacturers were there, and the occasion was one which those among them who were linguists took full advantage of. They had already met many of the delegates at a lunch given by the S.B.A.C. during the morning, and were therefore old friends when they met again at the reception. During the evening Mr. Dawson Reid, the well-known tenor, entertained those present with his magnificent voice.

#### A Model "Moth" for Cadets

A MODEL "Moth" aeroplane, 3 ft. span, was presented on May 8 to the training-ship *Worcester*, off Green-

hithe, Kent, by Captain F. E. Guest, former Secretary for Air, on behalf of the Air League of the British Empire.

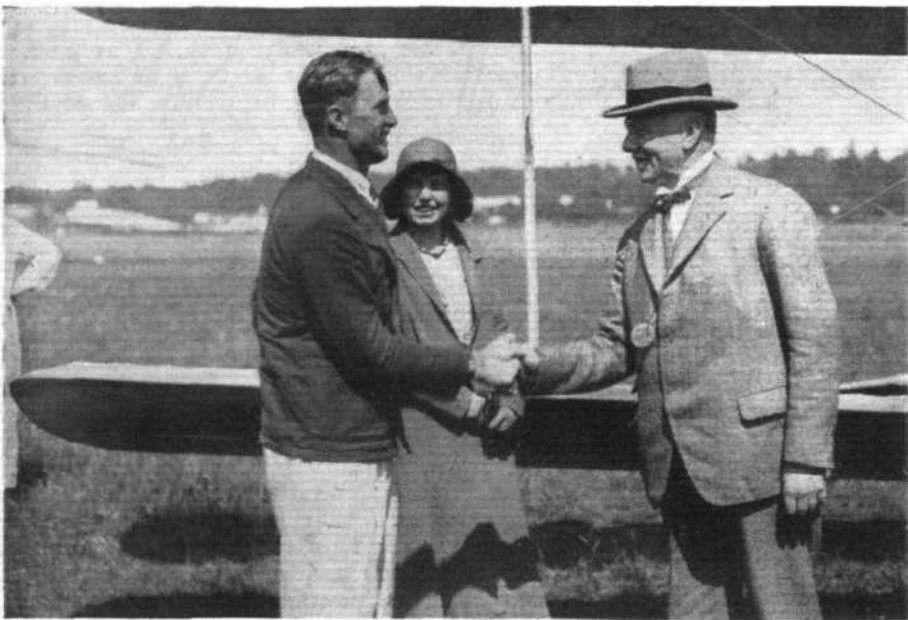
#### First Entries for the King's Cup.

So far eight entries have been received for the King's Cup Air Race, which takes place on July 5. They are as follows (the pilot being given in brackets):—

F. S. Symondson, D.H. Gipsy Moth (F. S. Symondson); Alderman C. V. Walker, Blackburn Bluebird (Fl./Lt. J. Bradbury); C. A. Villiers, Martinsyde A.V.1 (C. A. Villiers); K. G. Murray, D.H. Gipsy Moth (C. Murray Pickthorn); F. Gough, D.H. Gipsy Moth (F. Gough); Sq./Ldr. J. McKelvie, D.H. Gipsy Moth (Lord Malcolm Douglas-Hamilton); Air Vice-Marshal A. M. Longmore, C.B., D.S.O., Blackburn Bluebird (Ft./Lt. D. F. W. Atcherley); Lieut. C. R. V. Pugh, R.N., Spartan (Lieut. C. R. V. Pugh).

The entries are subject to final acceptance by the Royal Aero Club. Entries close 5 p.m., June 22, 1931; entry fee £5. Late entries close 12 noon, July 1, 1931; entry fee £10. Entries should be made to the Royal Aero Club, 3, Clifford Street, London, W.1.





SCOTT  
FLIES HOME  
IN  
“EASY  
STAGES”

But he nevertheless breaks  
the record for the Home-  
ward Trip, by 48 hours,  
having completed the  
journey in 10 days 23 hours !

**CONGRATULATIONS!** Lord Amulree, at Brooklands on Saturday, congratulates Mr. C. W. A. Scott on his fine flight from Australia to England. Mrs. Scott, it will be observed, is obviously pleased and proud. (FLIGHT Photo.)

**W**HEN Mr. C. W. A. Scott—who last April established a wonderful record for a solo flight from England to Australia in 9 days 4 hours—announced his intention of flying back, he stated he was going to do so in easy stages. He actually left Wyndham, North West Australia, early on May 26, and shortly after 7 p.m. on June 5 he landed at Lympe aerodrome in blinding rain! “Taking it easy” in this way, he was able to cover the 10,000 odd miles from Australia in 10 days 23 hours—and thus beats the previous fastest time for the journey, made by Air Commodore Kingsford Smith, by some 48 hours.

Of the two flights, Scott said he found the return home was the more difficult. From Australia to Singapore he had good weather, but from Rangoon conditions were very different, for the Monsoons had broken—and he got them all right—and for the greater part of the way onwards he experienced head winds and rain.

For instance, after leaving Singapore for Akyab, he ran into a solid wall of rain an hour out of Alor Star (Kedah), and for hours he dodged about trying to find a way through—at one time returning towards Alor Star. He managed, however, to reach Rangoon.

On the next stage to Karachi he met with very different troubles, for after leaving Calcutta he had to land at Gaya because of the heat—he was flying without a sun-helmet. In fact, on this section to Aleppo he had to avoid flying during the middle of the day. Nevertheless, he only did about six hours’ night flying over the whole trip.

After leaving Aleppo he again encountered stormy weather; some difficulty was experienced in crossing the mountains outside Aleppo, for he was unable to climb sufficiently high with his heavily-laden “Moth”—on one occasion he saw through a break in the clouds, the mountains right before him, and so had to turn seawards, and, battling against strong headwinds, eventually reached Brindisi. From here he flew the 1,350 miles to Lympe in 18½ hours, once more under trying weather conditions. The wind and rain from Northern France to Lympe—he ran into a terrible storm over Paris—gave his little machine a very rough time of it.

However, he arrived safely at Lympe in, as previously stated, a heavy downpour of rain, and was greeted by Comdr. Deacon with “Well I’m hanged; you are a brick. Congratulations, you have done it again.”

The daily log of Mr. Scott’s flight, with approximate mileages, is given in the next column.

On Saturday, June 6, Mr. Scott flew from Lympe to Brooklands, where he was given an official welcome by Lord Amulree, Secretary of State for Air, and a more personal welcome by Mrs. Scott.

In welcoming Mr. Scott, Lord Amulree contrasted the present state of affairs when a man could fly between England and Australia in nine or ten days with the old days at Brooklands when pioneers like A. V. Roe were experimenting. He mentioned that Mr. Scott, like himself, was a native of Perthshire, and his success would give great satisfaction in the North.

Mr. Scott made a very modest reply, saying that the thought of having to make a speech had terrified him all the way as he flew to Brooklands. He had been very glad when he reached Australia, for that had been the end of the first flight; but he was even more glad to be back in England after the second. It was noticed that Mr. Scott, most unpatriotically, said “England” and not “Great Britain.”

Capt. Matthews, who has also flown to Australia, then said a few words. He said that he had boomed all the way, and that made him realise particularly what Mr. Scott had done. He considered that Scott had done something absolutely superhuman.

As in all these great flights, congratulations are also due to the machine and its components, upon which so much depend for the success of the flight. In this case, the machine was a similar D.H. “Gipsy Moth” (Gipsy II engine) to that on which Scott made the outward trip, and it was placed at his disposal by Lord Wakefield—always to the fore on these occasions. “Castrol” oil and “Shell” spirit were used for “feeding” the engine, while “B.T.H.” magnetos supplied the necessary “umpteens” sparks per day. It is almost a foregone conclusion that Mr. Scott forgot and fitted K.L.G. plugs, while Smith’s Aviation Instruments, including the “Huson” aperiodic compass, aided in Mr. Scott’s splendid navigation.

May 26 .. ..	Wyndham-Sourabaya (1,200)
.. 27 .. ..	Sourabaya-Batavia (500)
.. 28 .. ..	Batavia-Singapore (1,160)
.. 29 .. ..	Singapore-Rangoon (1,200)
.. 31 .. ..	Rangoon-Calcutta-Karachi (2,000)
June 1 .. ..	Karachi-Bushire (1,100)
.. 2 .. ..	Bushire-Basra (250)
.. 3 .. ..	Basra-Aleppo (750)
.. 4 .. ..	Aleppo-Brindisi (1,150)
.. 5 .. ..	Brindisi-Lympe (1,350)

**The Fédération Aéronautique Internationale**

THE annual congress of the F.A.I. is being held in Bucharest, as the President, Prince George Bibesco, is a Rumanian. He is, however, still convalescent after his

recent crash. Great Britain is represented by Col. O’Gorman. Advantage was taken of this session to unveil a tablet on the spot where King Carol landed in his aeroplane a year ago to claim the crown of the country.

# Airport News

## CROYDON

THE weather last week was fairly good, and the services were run to schedule.

On Friday evening "Hannibal" arrived. Everyone was tremendously interested in this giant machine built by Handley Page, Ltd., and we all hope that, in due course, it will be as great a success as the Argosies. After a quick inspection by Imperial Airways inspectors, the machine flew over to Hanworth. We were all surprised at the take-off; it was less than 100 yards, and "Hannibal" climbed like a scout.

On Wednesday, Derby Day, Imperial Airways ran a special service for the Derby, which included transport from Croydon to the course at Epsom.

Mention of the Derby, none of the Irish Sweepstake money reached this quarter again.

The Desoutter Aircraft Company have just completed an air ambulance; this, I believe, is the forerunner of a new Red Cross Air Corps which is being formed.

We are all delighted to hear that at last Mr. Dupe's Services at Lympe are to be recognised. It is a well-known fact that Lympe depends on the Sergt.-Major, and we know that, in his new position of Assistant Aerodrome officer, he will be as popular as ever. He is a good fellow, and a real hard worker. All success to him on his promotion.

The earthquake early on Sunday morning did not disturb the peace of Croydon, and the aerodrome still remains whole.

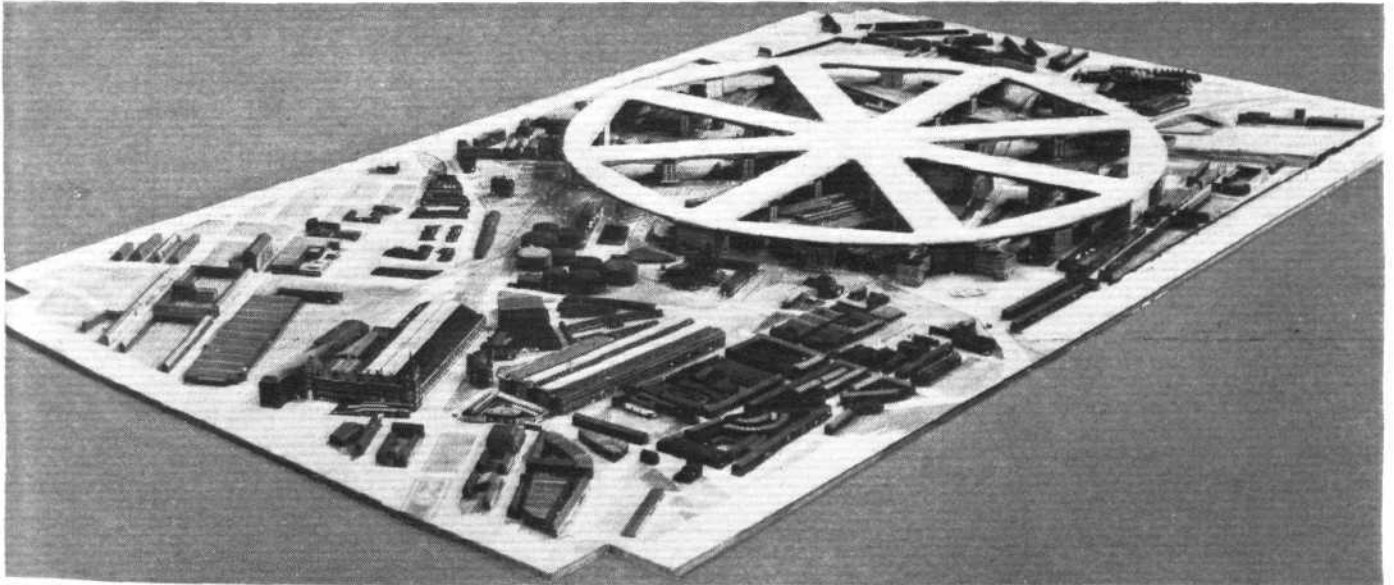
The traffic figures for the week were:—Passengers, 1,083; freight, 84 tons. P. B.

## KING'S CROSS AERODROME

AN ambitious £5,000,000 scheme for an overhead aerodrome at King's Cross has been suggested by a committee of business men, architects, and engineers. Under the scheme, if the necessary Parliamentary and other powers are obtained, a huge central air and rail terminus would be built on a site now occupied by railway sidings near King's Cross and St. Pancras stations. The proposal includes the re-planning of goods yards and the construction of warehouses suitable for supporting an overhead concrete landing ground. Mr. C. W. Glover, the member of a London

firm of engineers and architects who has designed the scheme, states that:—

"The committee includes Sir Walter Peacock and a number of prominent business and professional men. Negotiations are proceeding with the various interests involved, and a model of the scheme is to be exhibited at the Institution of Civil Engineers this week, when we shall invite criticism from experts. In effect it provides for the removal of Croydon aerodrome to Central London, and the setting up of a terminus for passengers, mails, and goods by air, road, and rail, in the heart of London."



AN AERIAL AERODROME FOR LONDON: A scale model of an aerodrome which it is suggested could be built over King's Cross and St. Pancras railway stations. The aerodrome would be about half a mile in diameter. (FLIGHT Photo.)

### The Land Value Tax and Aerodromes

THE Council of the London Chamber of Commerce, on the advice of its Civil Aviation Section, have addressed a letter to the Chancellor of the Exchequer drawing his attention to the serious effect which the proposed Land Value Tax is likely to have on the development of Civil Aviation in this country. It is pointed out that under Section 19 of the Finance Bill now before Parliament, land owned by the State or by Local Authorities as well as that owned by certain public undertakings, will not be subject to the tax, and that, therefore, State owned and Municipal aerodromes will presumably be exempt. On the other hand, aerodromes which are publicly used but privately owned will not be exempt, although they have to be licensed for public use under the Air Navigation Act, 1920.

The London Chamber, realising the immense importance to the future of this country of a progressive aviation industry, has been doing its utmost to encourage the construction of aerodromes, whether by municipalities or by private enterprise. The industry will be particularly hard hit if it is called upon to support this additional taxation. It is still in its infancy and unable at present to pay its own way, a fact which the State recognises by the granting of subsidies to air transport undertakings and flying clubs. It is strange that, whilst giving exceptional aid in this way, the State should at the same time penalise it so severely in another. The Council of the Chamber have accordingly submitted that all airports, airparks and landing grounds licensed for public use, as well as those belonging to aircraft manufacturers, should be exempt.



# Airisms from the Four Winds

## Do.X Gets Across

THE giant German flying boat, DO-X, which left Friedrichshafen on November 5 last year to fly to South America via Holland, England, France, Portugal, and Africa, has arrived in Brazil. As reported last week, the flying boat arrived at Porto Praia, Cape Verde Is., from the African coast, and on June 3 an unsuccessful attempt was made to take off. However, a start was made next day, and—after a false report of having fallen into the sea—she arrived at the Island of Fernando da Narouha soon after midnight, June 4-5. She left again at midday, and reached Port Natal, Brazil, in the afternoon, June 5. There were 13 persons on board, including the Portuguese Admiral, Gago Coutinho.

## Mrs. Montagu's Progress

THE Hon. Mrs. Edwin Montagu and her pilot, Mr. Belville, continuing her aerial tour of Persia and Russia, left Moscow for Berlin on June 3.

## Col. Lindbergh's Pacific Venture

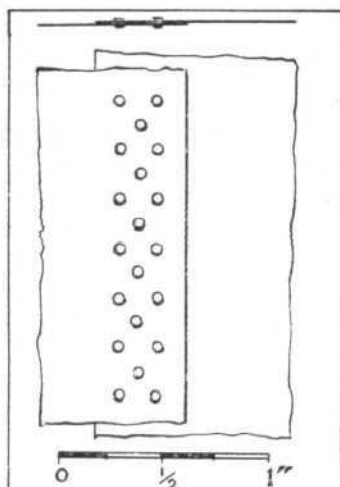
COLONEL LINDBERGH is planning to leave the United States within a month and fly across the Pacific accompanied by his wife. He has asked the State Department to secure permission for him to fly over foreign territories, as his plan includes a tour of three weeks' flying in Japan and China. The trip is to be made purely for pleasure, with every possible avoidance of risk. Colonel Lindbergh will use the low-winged monoplane wherein he and his wife recently made a record-breaking flight across the United States. This will be equipped with floats for the Pacific flight.

## Mlle. Bernstein Injured

Mlle. LÉNA BERNSTEIN, the French airwoman, was badly injured on June 5 while taking off at Istres aerodrome. She was setting out for Egypt in an attempt to break the women's record for distance in a straight line, ran her machine into a pile of stones on the edge of the aerodrome, and was thrown violently out of her machine. She fractured her skull and broke an ankle. She is now in hospital, and her condition is serious.

## General Balbo's Escape

GENERAL ITALO BALBO, the Italian Air Minister, had a narrow escape from drowning on June 5. After inspect-



## BEAUTIFUL WORK:

This little diagram (re-produced actual size) gives an idea of the size of the riveting with which the hull plates of the Z.M.C. Metalclad Airship (described in "FLIGHT" for May 22 and 29 last) are joined.

ing a school at Caserta, he was taking off in a seaplane near Capri, accompanied by a Major Cogna, to return to Ostia, when the machine hit some flotsam and sank. The Air Minister was carried under, and did not emerge for 40 seconds, as he was strapped in his seat and was wearing a parachute. He was slightly cut and bruised, but took off forthwith in another seaplane, and flew to Ostia. The British Air Ministry sent him a message of congratulation on his escape.

## The Fairey Long-distance Aeroplane

It is understood that Squadron Leader O. R. Gayford, of the H.Q. staff of the Coastal Area, and Flight-Lieutenant of the R.A.R., South Farnborough, will be the pilots of the new Fairey-Napier long-distance monoplane which is now being built. It is stated that the first flight will be to Egypt. A non-stop flight to the Cape may be undertaken in October.

## World's Distance Record (Seaplanes) Beaten

THE French airman, Lt. Paris, beat the world's distance record for seaplanes in a closed circuit on June 6, when he had covered 2,749 miles—and was, when the report was sent out, still flying.

## Professor Piccard's Balloon Ascent

AFTER investigating the records, the Swiss Aero Club has officially registered 15,781 metres (51,458 feet, or about 9½ miles) as the height reached by Professor Piccard in his balloon. The balloon itself and a number of the instruments were taken to Augsburg, and the balloon was carefully overhauled at the Riedinger balloon works. It was found that the valve worked correctly, and that the valve rope must have got twisted and so prevented the aeronauts from descending at their will. Professor Piccard has announced his intention of making another ascent in the autumn, this time to investigate the conditions of the lower atmosphere.

## The "Deutschlandflug," 1931

ENTRIES closed for the "Deutschlandflug," 1931, on June 1, and 16 machines have been entered. As late entries may be made up till July 1, it is to be supposed that a few more machines will be entered. The "Deutschlandflug" is confined to modern sports machines, and it is, moreover, stipulated that they must be fitted with German engines. The machines entered include the follow-



AN ECHO OF THE COURTAULD RESCUE: One of the D.H. "Moths" of the British Arctic Air Expedition fitted with skis, which attempted to reach Mr. Courtauld when he was stranded on the Greenland ice gap. The Esquimaux, who had never before seen an aeroplane, are helping to refuel the machine before it set out on its unsuccessful attempt.



ing types:—11 Klemm Va with Argus As 8 engines; two Junkers A 50 with Siemens Sh 13 engines; one BFW 23B with Siemens Sh 13 engine; one BFW M23B with Argus As 8 engine; one Klemm 26a with Siemens Sh 13 engine. The prizes to be won total 75,000 Marks (approximately £3,750).  
**A "Cutty Sark" in Stockholm.**

ALTHOUGH it was not found possible for Saunders-Roe, Ltd., to take a stand at the Stockholm Aero Exhibition, we are very glad to learn that they followed the suggestion made in FLIGHT some time ago and sent a "Cutty Sark" amphibian (2 Gipsy engines) over to Stockholm, so that visitors during the latter part of the show might have an opportunity of seeing the machine. The "Cutty Sark" carried Mr. John Lord, Mr. Ballardie and Captain Scott, and it is understood that this little expedition was able to give full information to people interested in the SARO boats, as well as the Spartan products.

#### A New Flying School.

THE Right Honourable the Earl of Stamford and Warrington will open a new school of flying at Barton, the Air Port of Manchester, on Saturday, June 20, at 3.30 p.m. The new school facilities are arranged by Northern Air Lines (Manchester), Ltd., and Mr. G. F. Yuill, late of the Scottish Aeroplane Club, will be Chief Instructor. The school will be under the direction of Mr. A. N. Kingwill, and De Havilland Moth aeroplanes will be the standard type used for training. For those who desire to take them, courses have been arranged in ground instruction and in aircraft and engine maintenance. The company will garage and maintain privately-owned aircraft, and has extensive workshops for overhaul and repair work. There are no formalities to be observed, as no club is being established. Pupils will take instruction when they wish, and a residential hotel (the Air Port Hotel) adjoins the flying ground, so that pupils can, if they so desire, live next to the actual school. Trial lessons will be given at a cost of £1.

#### French Aircraft and Germany

THE German Ambassador in Paris made strong representations about French aircraft flying over German territory. The French Air Minister ordered strong disciplinary action to be taken against some parties concerned. In one case, however, French aircraft returning from the Stockholm exhibition ran into bad weather, and approached the Frisian Islands in order to get help if necessary. When they had received their bearings, they turned away from the shore.

#### Sikorsky Developments

THE Sikorsky Aviation Corporation, on May 17, delivered the first of three model S-41 amphibians to the United States Naval Air Station, Anacostia, D.C. This plane is the first of three delivered for manufacturers' demonstration and submission to the trial board of the Bureau of Aeronautics, Navy Department. The S-41 is



**A VISITOR AT VINCENNES:** During the National Aviation Meeting at Vincennes on May 24-25 (reported in our issue for June 5), the Bleriot "125" twin-fuselage bi-motor monoplane provided one of the chief items of interest amongst the new types presented.

powered with two 525-h.p. Hornet engines, has a gross load of 13,800 lb., a top speed of 131 m.p.h., and a passenger capacity of 16 persons. The Navy will use these ships for transport service. Captain Boris Sergievsky, chief test pilot for the Sikorsky Aviation Corporation, recently returned by boat and rail from Chile after flying a Sikorsky S-41 to Santiago. This trip of 6,800 miles was covered in 62 hours and 45 minutes' flying time. The return trip by boat and rail required 19 days! The longest over-water jump he made on the flight down was over 700 miles. This was from Havana, Cuba, to Tela, Honduras, when he was over the Caribbean Sea for 7 hours without seeing land. The longest jump made in one day was 1,140 miles. The highest altitude over the Andes was 16,000 feet. The highest speed was 132.5 m.p.h. The longest non-stop hop on this trip was from St. Elena, Ecuador, to Lima, Peru, of 950 miles in 8 hours and 51 minutes, with a gross load of 13,100 lb., thus making a record for this distance with such a load.

#### Andover Air Display

A FLYING display is to be given at Andover aerodrome on June 19, 1931. No aircraft, other than those taking part in the display, are to land at Andover on that day except in case of emergency.

#### A New Comper Director

WE understand that Mr. Francis Francis—a private owner of a "Puss Moth" and a "Cutty Sark"—has joined the Board of the Comper Aircraft Co., Ltd., as a Director.

#### The International Commission for Air Navigation

THE I.C.A.N. concluded its 19th session at St. James's Palace on June 5. The Prime Minister addressed the session in the morning, and said that he regarded air travel as one of the greatest boons which science had conferred on mankind. International frontiers could not be seen from the air, and lost their meaning when one could fly over several countries in a day. It was the task of the Commission, he said, to help on the new view, and there was no task of greater importance. He appealed to the States which had not yet signed or ratified the protocol of June, 1929, to do so.



**ANOTHER ECHO:** Major Sydney Cotton's Bellanca Monoplane, in which he set off to the rescue of Mr. Courtauld. Upon reaching Iceland Major Cotton learned that the rescue had been effected, and then returned home. (FLIGHT Photo.)

# Air Transport

## AERIAL TRAFFIC AT ST. HUBERT AIRPORT, MONTREAL

**I**NTERNATIONAL air traffic through the St. Hubert airport at Montreal showed a substantial gain during the twelve months ended March 31, following steady progress since the opening of the port three years ago. During the period under review 759 aeroplanes and one airship arrived from abroad, and 723 aeroplanes and one airship departed, the corresponding totals for the previous year being 498 aeroplanes arriving and 511 departing. In 1928-29 the corresponding figures were 172 and 174. A slight decrease was registered last year in the number of passengers arriving from abroad, but there was a large advance in the number departing. The arrivals in 1930-31 were 668; in 1929-30 they were 698, and in 1928-29 115, departures during the same years being 1,077, 753, and 135. A total of 1,790 pieces of baggage was carried by the 1,745 passengers last year.

A total of 144,615 lb. of air mail was carried through the port of St. Hubert last year; incoming mail totalled 123,713 lb., and outgoing mail 20,902 lb. The December mail service was particularly active, 12,510 lb. being received and 1,838 lb. sent out. Only 35 pieces of express matter were, however, sent out during the year, as compared with 2,058 pieces received from abroad.

### A New Canadian Air Transport Company

A NEW air transportation company has been formed at Edmonton, Alberta, for the conveyance of prospectors and supplies to the recently discovered mineralised areas in the neighbourhood of Great Bear Lake and Coppermine River. The headquarters of the company will be at Edmonton, and a flying base will be maintained at Waterways. Six machines are reported to have been acquired by the organisation, which is known as Spence-McDonough Air Transport, Ltd. Mr. W. A. Spence, a well-known Canadian airman, is Vice-President of the company, and Captain W. J. McDonough is Managing Director, the President being Mr. Fred J. Bailes, of Toronto. All these officers have special knowledge of air transport and the supplying of field parties operating in the far north.

### French Air Liner Wrecked

THE Air Union announces that a French mail plane from Indo-China to France, which left Saigon on June 6, fell into the river at Sandoway, 150 miles south of Akyab on June 7. The three occupants were killed, but the mails are intact.

### Postal Rapidity!

AN interesting example of the rapidity with which our mails work nowadays, when compared with the speed that common or garden aircraft can travel, occurred at Heston recently. On Monday, June 1, a postcard was received from Mr. and Mrs. Chalmers which had been despatched from Baghdad on May 17. Mr. and Mrs. Chalmers themselves, however, arrived at Heston on the Saturday previous, having in the meantime visited Basra, returned to Baghdad, spent two days in Constantinople, and were delayed a further two days owing to weather in Bulgaria.

An air service is maintained on six days of the week from St. Hubert to Albany, N.Y., as well as to Toronto, Hamilton, London, Windsor, and Detroit. This latter service has recently been extended to Chicago, St. Paul, Winnipeg, Regina, Moose Jaw, Medicine Hat, Lethbridge, Calgary, and Edmonton, and a summer service to Rimouski connects with the inward and outward-bound mail steamers.

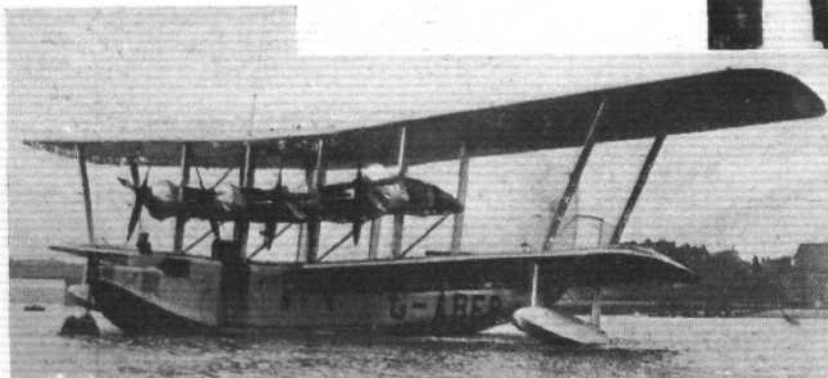
St. Hubert airport is situated about seven miles east of Montreal, and covers an area of approximately 650 acres. Work on the airport was begun in August, 1927, and a steel mooring tower for dirigibles, imported from England was erected in 1928. It may be recalled that the airship R.100 arrived at St. Hubert on August 1, 1930, after completing the Atlantic crossing, and used St. Hubert as a base for a trip farther inland. The airport is equipped with macadamised runways, spacious hangars, and all the latest aids to aerial navigation, and land has been reserved for the erection of an hotel should future conditions warrant.

The Montreal Light Aeroplane Club makes St. Hubert its headquarters and contributes to the general activity of the port.

during their journey home. They were not flying a machine such as Capt. Hawks gets round in, but just an ordinary Moth with a Gipsy engine.

### Business Trips by Air

A NOTABLE example of the value of the light aeroplane for business purposes is shown by a recent flight from London to Aberdeen. Mr. H. Stuart Tegner, Scottish Sales Manager of the Anglo-American Oil Company, accomplished the journey of over 500 miles in 4 hr. 55 min., and, in spite of adverse weather conditions, arrived within five minutes of scheduled time. The express train journey occupies 12 hours. "Miss Ethyl," the Westland Widgeon machine in which Mr. Tegner made his flight, is in everyday use in the Commercial Service of the Company.



**WIRELESS EQUIPMENT OF "KENT" FLYING BOATS:** In our issue for May 15 we described the Marconi Wireless Equipment installed in the Short "Kent" flying boats used on Imperial Airways. We are now able to give two illustrations showing one of the flying boats with the masts and aerials which enable the pilot to communicate when on the water, and also showing the receiving and transmitting equipment installed in the hull.





# MOUNT BATTEN

Nos. 204 and 209  
(Flying Boat) Squadrons

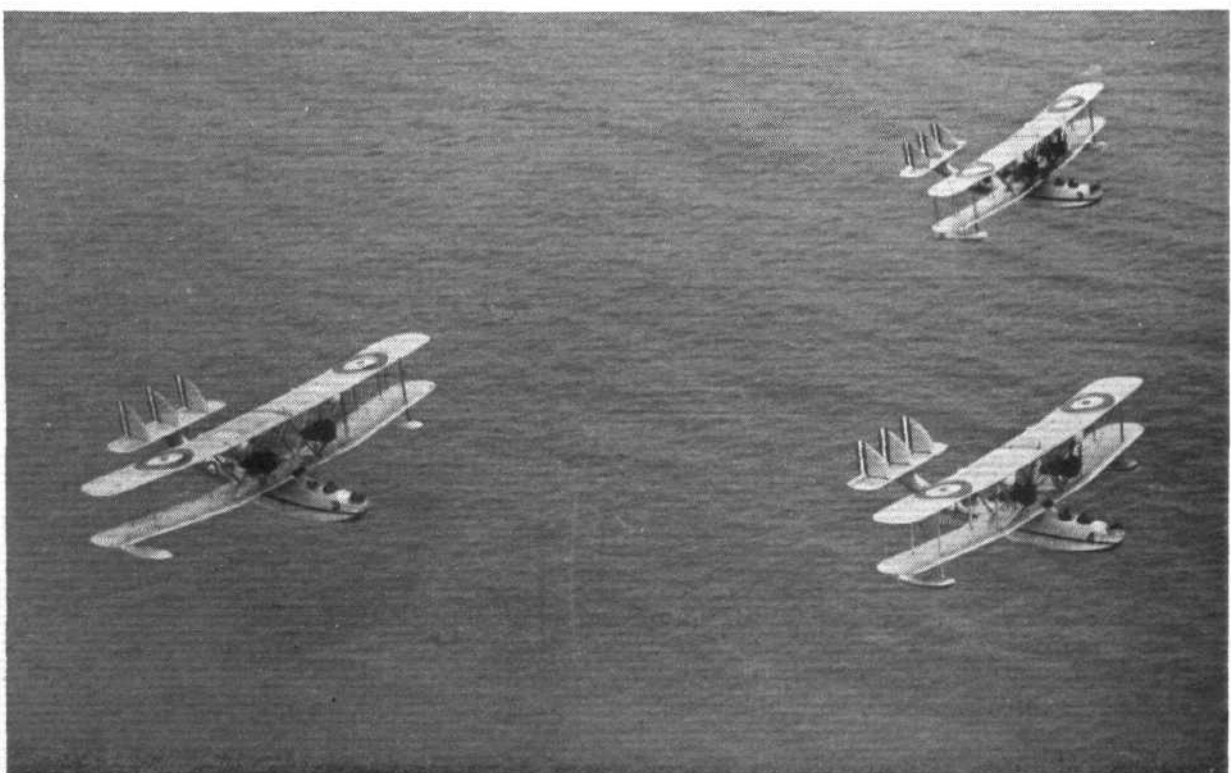
By

MAJOR F. A. de V. ROBERTSON, V.D.

“THE good old ‘Southamptons’ never let us down, bless their hearts!” say the officers of No. 204 (Flying Boat) Squadron. This squadron uses “Southampton” boats with Napier “Lion” engines, and it loves them. No. 209 (F.B.) Squadron, the other unit at Mount Batten, is equipped with the metal “Iris,” and it is the fashion for the men of No. 204 to allude to the Iris as a “pan-technicon.” But No. 209 does not seem to mind. The great Iris, with its deep V-bottomed hull, is held by many to be the most seaworthy of flying boats, and it can come down safely in a very heavy sea. Perhaps that same acute V may make the Iris a bit loath to come unstuck, but, after all, that is the lesser of two evils. This is a subject which has been much discussed, but *FLIGHT* has always preached that a flying boat must be primarily a seaworthy craft. It was, we believe, the Supermarine firm which first adopted the maxim “Not an aeroplane which floats, but a boat which flies.” It is a maxim which is more and more coming to be recognised as sound. No startling performance in the air is worth while if there is a risk of losing your boat when she alights. One of the great advantages of a seaplane is that on normal flights there is always an aerodrome below her. She is not always on the look-out, as the pilot of a landplane must be, for a field suitable for a forced landing. When the seaplane is out at sea, beyond the range of harbours and creeks, one piece of water is as good as another from the alighting point of view. But the sea may be rough—it often is—and the boat must be able to get down safely and live in the

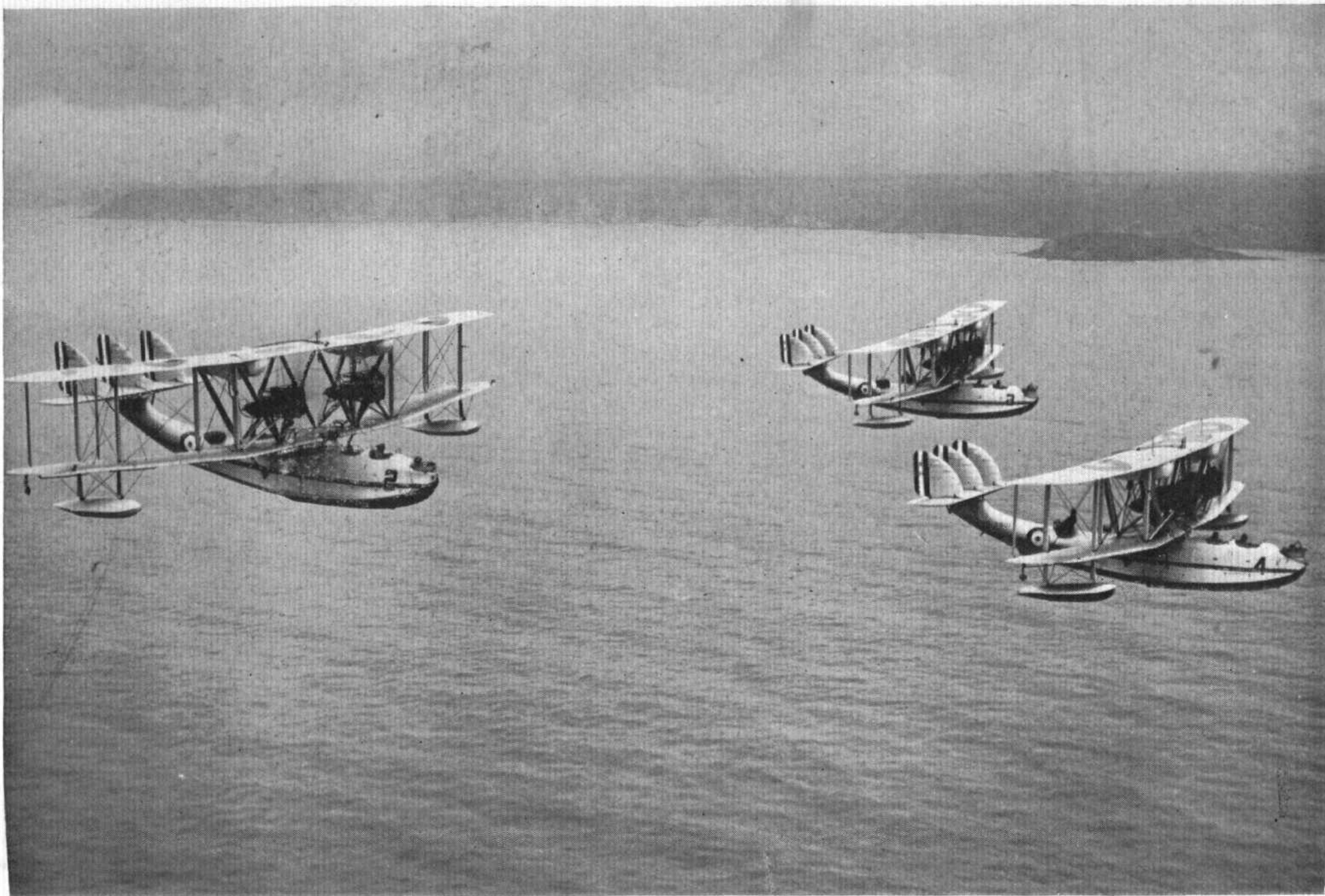
waves, or else she is in worse case than a landplane flying over mountains. Therefore, to our way of thinking, seaworthiness is a consideration which is second in importance to none.

Sometimes there is talk of eliminating forced landings by providing reserve engine power. That is a plan which should be regarded as a *sine qua non* for all commercial aircraft, seaplanes and landplanes alike. It is not so easy to apply it to service aircraft. If they are to do their proper work, loads must needs be heavy. Those who think in terms of Royal Air Force flying boats must, more than others, think Imperially. One great function of the flying boat must be to link up the various parts of the British Empire. To do this, it ought not to be necessary to rely on the goodwill and help of any foreign nation, however friendly. It follows from this that our ideal must be a boat which can fly non-stop from England to Gibraltar and from Gibraltar to Malta. The Iris can very nearly do it. Perhaps, in favourable weather, she might be able to do it. But it would be a freak flight, a mere “stunt,” with a heavy over-load of petrol, and probably after discarding a good deal of equipment which a service flying boat ought to have on board. “Stunt” flights are of no practical use. The flying boats of the Royal Air Force are only of real service to the Empire if they can be counted on to make the non-stop flight to Gibraltar in any weather which is not abnormal. There can be no question, in boats of the present-day class, of a reserve of power, except what is necessarily provided by the extra effort needed in the take-off. Further power becomes



No. 204 (Flying Boat) Squadron. (FLIGHT Photos.)





Three "Southamptons" (two Napier "Lion" engines) of No. 204 (Flying Boat) Squadron in formation off the Devon coast. (FLIGHT Photo.)

available when the petrol load has been materially reduced by hours of flying. But in the last resort, the boat must rely for her safety, not on her capacity to remain in the air, but on her ability to alight in a normally heavy sea and to remain afloat in it.

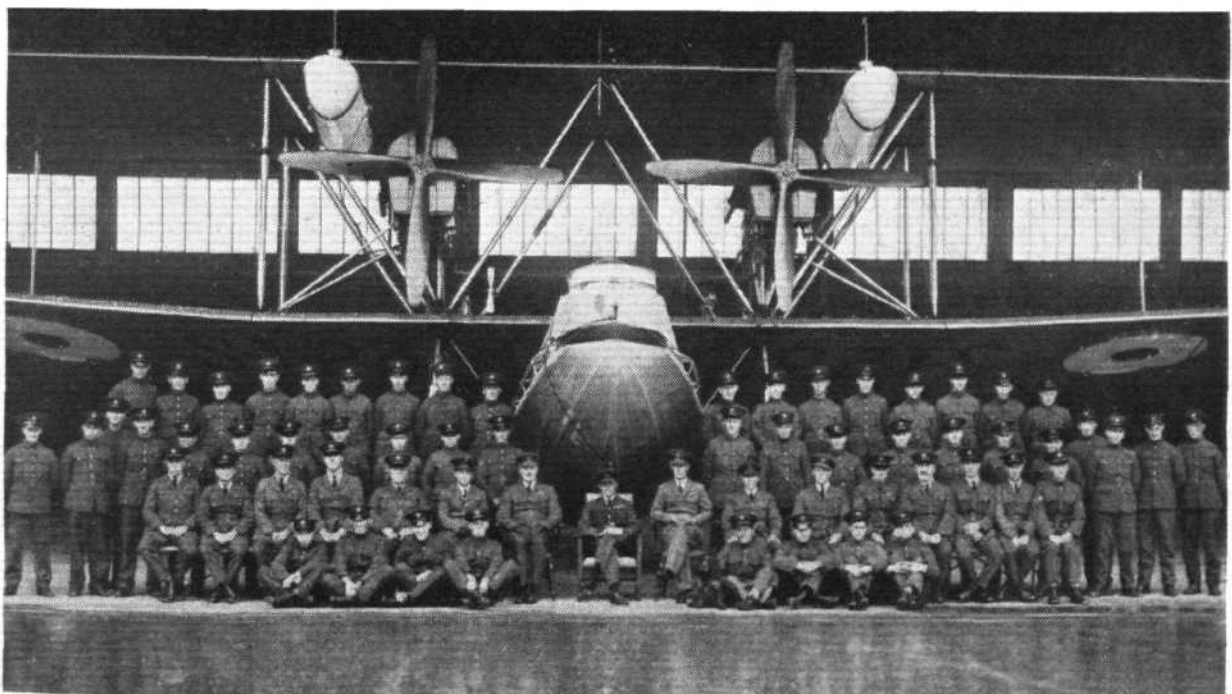
FLIGHT has always clamoured, in season and out of season (really there is no "out of season" in this connection), for continued and progressive development of the large flying boat. It seems to us the obvious policy for such a Power as the British Empire to pursue. The problems of the seaplane are quite different from those of the landplane, and the former set of problems have a fascination all their own. That being so, it was a great privilege and a great pleasure to receive permission from the Air Ministry to visit Mount Batten and to learn something at first hand of the working of large service flying boats.

Mount Batten is particularly interesting because there are two squadrons there using two different types of boat, the Southampton and the Iris, and by means of comparisons which are anything but odious the senior officers are able to study the advantages of each type and to estimate the requirements of the future. To add a personal touch, nothing could be more pleasant than to be the guests of Wing Commander Sydney Smith, O.B.E., O.C. Station H.Q., and of Wing Commander E. J. P. Burling, D.S.O., D.F.C., A.F.C., O.C. No. 209 (F.B.) Squadron, and Squadron-Leader K. B. Lloyd, A.F.C., O.C. No. 204 (F.B.) Squadron. The Officers' Mess is not of the latest Air Ministry sealed pattern. It smacks rather of war-time architecture. But it would be hard to find a mess where guests are received with more whole-hearted hospitality. As the opening sentences of this article indicate, the officers are all enthusiasts on their particular branch of flying. They admit that it has its drawbacks, compared with some other classes of flying. A landplane can be run out of its shed, her engine or engines started, and off she goes. A flying boat has to be hauled by a tractor out of its shed and carefully lowered down the slipway. It is when she is afloat that she requires more care than is asked for by any other form of aeroplane. When a landplane is on an aerodrome all its troubles are over for the

time being. But the motor boats have to get alongside the flying boat without doing her any damage and put the crew and stores on board. She is refuelled afloat from a special refuelling lighter. And here it may be remarked that the whole efficiency of a flying boat station depends upon its marine section. The marine section at Mount Batten is exceptionally smart, and their watermanship is very high class. No damage to a flying boat has ever resulted from mishandling of the surface craft. When the flying boat commences to run for a take-off, there are other troubles, *e.g.*, tide as well as wind. It has been said that the acme of perfection in a boat pilot is to take his crew off dry. But sometimes even the best cannot avoid shipping a sea. In cold weather the boat is a cold place when it is in the air. It gets no warmth from the engines, and it is draughty itself. If the crew start wet, they have a very unpleasant time. The pilots admit all this, and yet they love boat work. On the other hand, in fine weather there is nothing in the world so delightful as flying over a sunlit sea, and especially along a picturesque coast like that of Devon. There is, too, a satisfaction in navigating over the sea which is unknown to the landplane pilot. And, while every pilot loves a good aeroplane, we know that every sailor loves his ship. So a double bond of affection links the boat pilot to his flying boat.

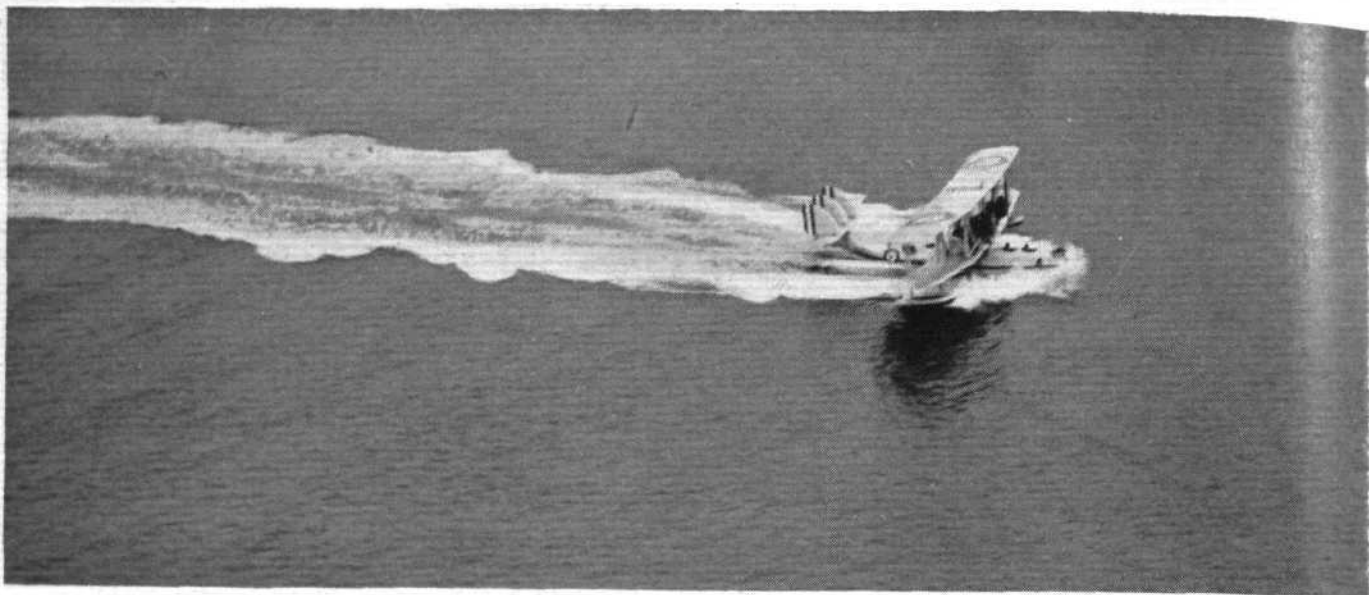


The Pilots of No. 204 (Flying Boat) Squadron. Names from left to right:—Flight-Lt. W. H. Jinman, M.B.E.; Flight-Lt. E. S. Moulton-Barrett; F./O. D. F. Satchwell; Sqdn.-Ld. K. B. Lloyd, A.F.C.; Flight-Lt. R. H. Carter; Sergt. D. Williams; Sergt. J. H. Osborne; F./O. F. R. Worthington. (FLIGHT Photo.)



Officers and Airmen of No. 204 (Flying Boat) Squadron. (FLIGHT Photo.)

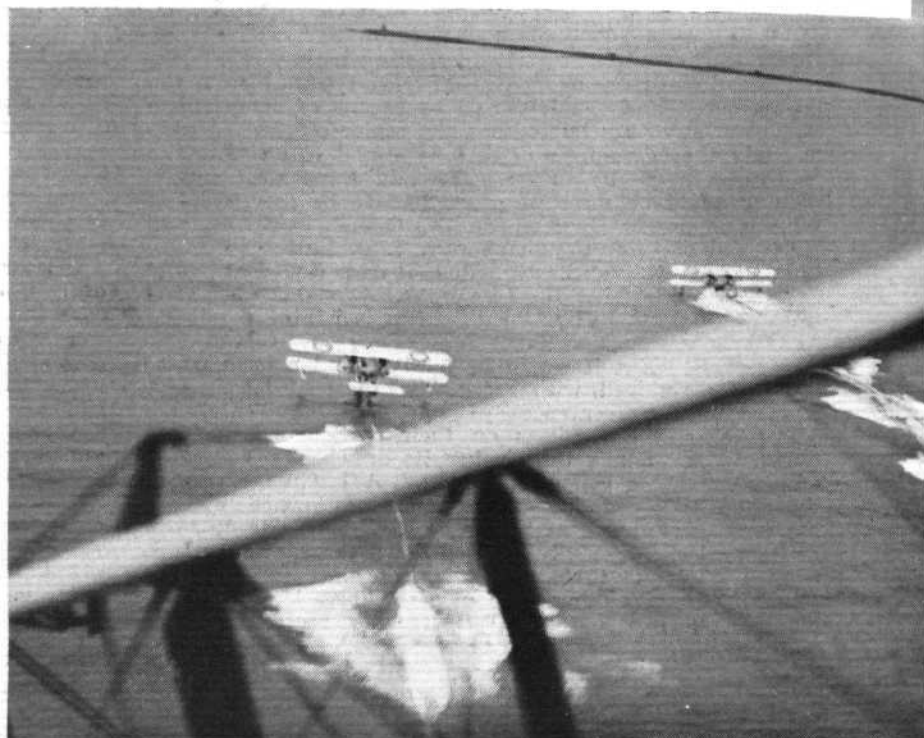




Mount Batten (née Catterwater) had a long grass widow existence in charge of a care and maintenance party. In February, 1929, the present C.O., Wing Commander Sydney Smith, took command there and formed No. 204 Squadron with Southampton. Sqdn.-Ldr. Lloyd, who had not previously been a boat pilot, took command of it in the following September. Incidentally, from the associations of his name, one would have felt sure that the Station C.O. must have originally been in the Navy; but he was not. He began life as a gunner. The Iris squadron, No. 209, began to form on January 15, 1930. Wing Commander Burling only took command of it in May this year, coming from a course at the Senior Officers' (Army) School at Sheerness. The three

**Wing-Commander Sydney W. Smith, O.B.E., Commanding Station H.Q., Mount Batten.**

(FLIGHT Photo.)



Above, and to the right, are three pictures of "Southamptons" of No. 204 (Flying Boat) Squadron taking off in Plymouth Sound. The breakwater can be seen ahead. (FLIGHT Photos.)

decorations implied by the initials after his name tell of gallant and good work in the Navy and the Royal Air Force. But the Air Force List does not mention a certain plain dark blue ribbon which he wears on his right breast. It may be added that he certainly can put an Iris down slowly and gently on the water. *Crede experto.*

#### Training and Operations

Officers go through a course in boat work at Calshot before they are appointed to a F.B. squadron. The year's training of a squadron is divided into two parts. From October to April the training is individual. The new pilots have to get used to applying the knowledge which they acquired at the school. All the *personnel* have to be trained in their various duties. There is practice in navigation, in handling a boat when the wind blows across the tide, in gunnery, and in all the multitudinous functions which must be carried out by the crew of a boat. By the end of April each boat is ready to play its part in combined work.

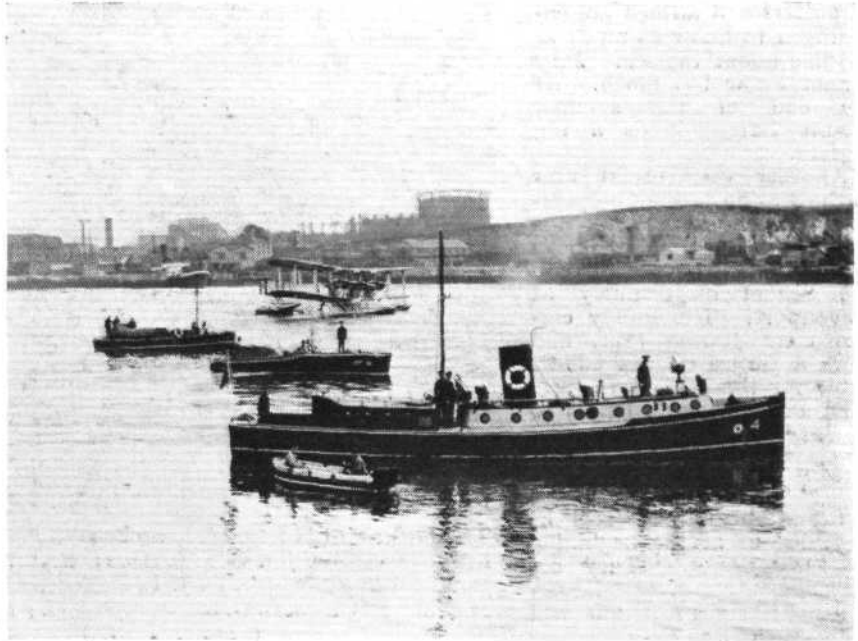
From May to September is the period of squadron training. The squadron goes on cruises. The exercising area for Mount Batten is, roughly, the Irish Sea.



The Marine Section at Mount Batten. In front is a motor dinghy. The large craft is a semi-Diesel pinnace. Behind that is a Brooks "Stand-by," to attend at taking-off and landing. Furthest away is a twin-screw refueller. (FLIGHT Photo.)

It extends all up the west coast of Great Britain to Stornoway and across to the Irish coast. There are permanent moorings at Stranraer, which is used as an advanced base for the two squadrons.

Often the squadrons join in cruises and exercises with the Fleet. This spring No. 209 was ordered to join in the exercises of the Mediterranean Fleet, but the start was delayed by impossible flying weather down the west coast of France, and ultimately the orders were cancelled. Instead, the squadron made a cruise to Egypt, of which more anon. When working with the Fleet, the functions of a flying boat are definitely offensive. It is for lighter



aircraft to reconnoitre and report. The flying boat goes out to attack submarines or any other hostile craft which she may find. The boats are prepared to fly over land (they have crossed France from the Bay of Biscay to the Mediterranean) and attack objectives on land. Night raids over land as well as over the sea are also a possibility.

#### Fighter versus Boat

This year a very interesting programme has been carried out. No. 1 (Fighter) Squadron from Tangmere has been temporarily affiliated to Mount Batten. The "Siskins" arrived on Monday, May 18, at Roborough aerodrome, which is the municipal aerodrome of Plymouth, a few miles north of the town. This is the first occasion on which a fighter squadron has been affiliated to flying boat squadrons for tactical exercises. The fighters were to try various ways of attacking single boats and formations of boats. It would appear that the tactics for the boats would be to come down low over the water, and so cramp

the manoeuvring space of the fighters. Boats cannot have a gun port through the bottom of the hull. Low flying does not involve such risk for a boat as it does for a landplane bomber. The results of the exercises should provide the Air Staff with much valuable information.

#### Seamanship

Mention has been made of the very efficient marine section at Mount Batten. All the men on the motor boats are trained in the Royal Air Force, but the C.O. proudly boasts that they can hold their own in watermanship with the Royal Navy. All the airmen, however, are trained in seamanship. Of course, all of them must pass swimming tests. All are practised in rowing boats, and they are encouraged to take an interest in sailing. The three units at the station, the H.Q. and the two squadrons, have each a sailing whaler, and inter-unit sailing races are held during the summer. Lady Astor has presented a handsome sailing cup to be competed for by these units. In fact,

all officers and airmen are encouraged to know as much as possible about the sea. They cannot know too much. At the end of the summer Mount Batten holds a big regatta.

Another very useful unit of the station is the Co-operation Flight, which uses the Fairey III F seaplane. This flight works a good deal with the School of Gunnery at Devonport. The Fairey carries target-towing gear, and tows a target on a 2,000-ft. cable for the ground gunners (and also the flying boats) to fire at.

### Flying Boat Work

Flying boats may still be regarded as at the beginning of their career. They are destined to grow larger. Their powers of action will increase, and as they increase so will new problems have to be solved. Mount Batten is grappling with some of these problems already. For instance, the question has arisen of how best to swing the compass on a flying boat. A large landplane can taxi across an aerodrome to the compass-swinging base. A flying boat on land is not so mobile. There are obvious difficulties about swinging on the water; so Mount Batten is experimenting with swinging the compass in the air.

Other Government Departments besides the Air Ministry and the Admiralty are anxious to make use of the ever-growing powers of the flying boat. The Ministry of Agriculture and Fisheries enlists their help in preventing poaching, mainly by foreign fishing boats, inside the three-mile limit. The Ministry has a patrol cruiser which can deal with poachers when they are found, but flying boats are often able to spot poachers which would easily be able to escape the notice of a surface ship. One instance is on record of a flying boat escorting a poaching vessel into a British port; but usually a report is sent to the patrol cruiser. Flying boats have also carried out fishery patrols in Canada, especially from the Vancouver station. Even more effective than an occasional capture is the deterrent effect upon would-be poachers of knowing that at any moment they may be seen from afar by a flying boat which can send off a report by wireless and bring the cruiser to the spot.

The Board of Trade has also made inquiries as to how far flying boats can give assistance to wrecked ships. Mount Batten set to work, and after many experiments



The Officers of No. 209 (Flying Boat) Squadron. Names left to right:—F./O. G. I. L. Saye; Sqdn.-Ldr. J. H. O. Jones; Wing-Comdr. E. J. R. Burling, D.S.C., D.F.C., A.F.C.; Flight-Lt. L. G. Maxton, A.F.C.; F./O. C. Ryley. (FLIGHT Photo.)

evolved an apparatus. A line is dropped in such a way as to straddle the wreck, and to one end of the line is attached a canister containing either food or life jackets, or whatever may be thought most useful to the people on the wreck.

When the submarine H 47 was rammed and sunk off Pembroke in June, 1929, the flying boats of Mount Batten were asked to help the salvage craft by delimiting the oil patch over the sunken submarine. This a flying boat was able to do, and the limits of the patch were marked with buoys by the salvage craft. On another occasion a flying boat spotted and reported a ship on fire.

### Cruises by No. 209 (F.B.) Squadron

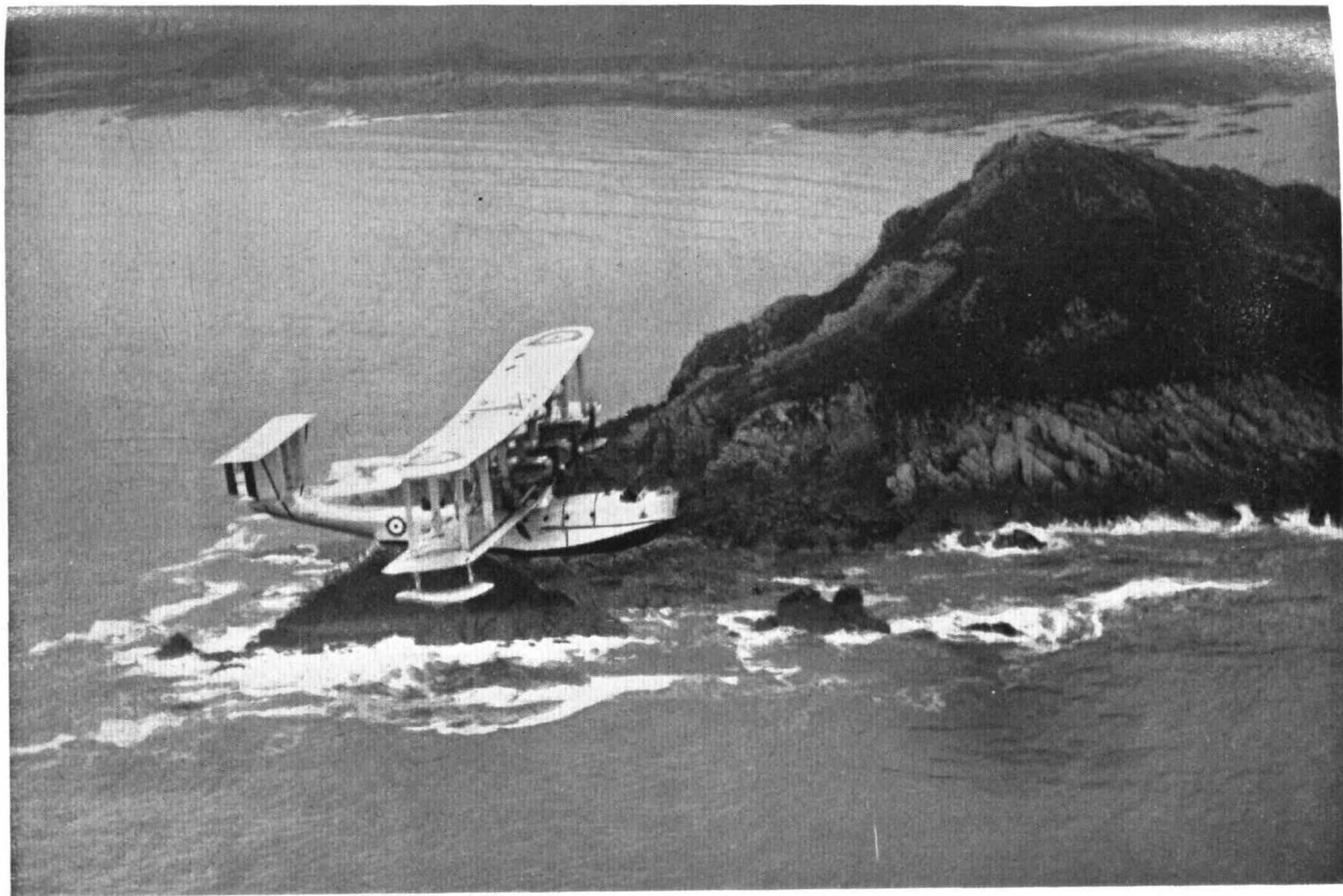
The cruise of one of the Iris boats to Iceland last summer to take part in the Iceland celebrations was a very notable feat, which was fully reported at the time. No more striking way could have been devised of showing British interest in the occasion, and the islanders were much interested and impressed by the performance of the Iris. Unfortunately, Wing Commander Sydney Smith, who set out on the flight, was taken ill with appendicitis at Stornoway, and had to go to hospital for an operation. Our photograph shows that he now looks in as good health as ever.

Another cruise by an Iris was to Gibraltar in August last year. The boat sent was under the command of Fl.-Lieut. L. G. Maxton, A.F.C., than whom there is no finer boat pilot in the service. On the way south, the Iris called at Lisbon and was given a great reception there by England's oldest Ally. There was some thought of attempting a non-stop flight from Gibraltar to Plymouth on the return journey, but the idea was abandoned. Such a flight would mean taking off with 1,500 gallons of petrol on board. In very favourable circumstances the non-stop flight might have been successfully accomplished. But it would have been in the nature of a "stunt" flight with that heavy over-load, and "stunt" flights teach no useful lessons, while they will probably create a false impression on the public. To be able to fly regularly and as a matter of course to Gibraltar in any reasonable weather, without having to alight or refuel in any foreign water, is the ambition of the flying boat branch of the service. It is asking a good deal of designers, but no doubt the demand



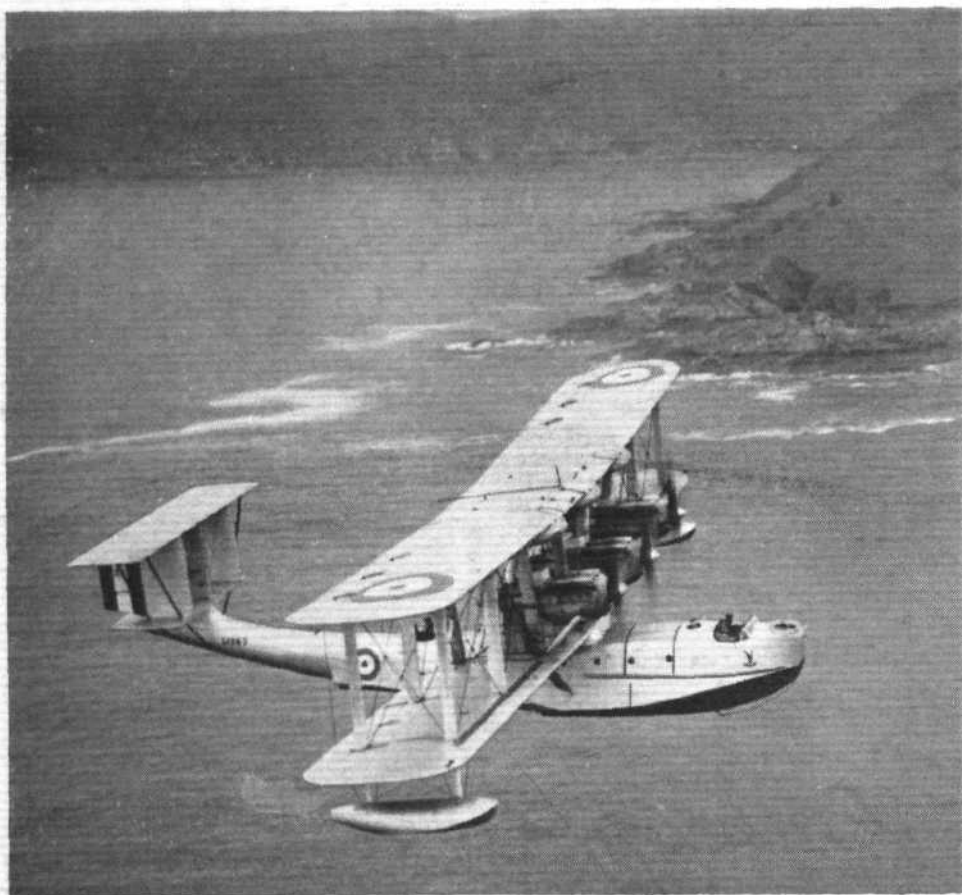
Officers and Airmen of No. 209 (Flying Boat) Squadron. (FLIGHT Photo.)





An "Iris" (three 650 h.p. "Condors") of No. 209 (Flying Boat) Squadron cruising off the Devon coast. (FLIGHT Photo.)





An "Iris" of No. 209 (Flying Boat) Squadron. (FLIGHT Photo.)

will be satisfied. For years we have been saying that flying boats must increase in size and range. Now this definite goal has been set. It is a reasonable goal, and until it has been reached the flying boat is not playing its proper part in linking up the British Empire.

The cruise to Egypt this spring was a unique event, and in various ways was unprecedented. It was the first time that a Chief of the Air Staff flew to an overseas command for the express purpose of inspecting the R.A.F. units. It must have been a record quick tour, and it included a non-stop flight from Berre (Marseilles) to Malta. Later on one Iris made a landing on Lake Timsah on the Suez canal, and this was the first occasion that this lake had ever been used by a large flying boat.

The cruise started on March 24, when the two Iris boats left Mount Batten. Wing Commander Sydney Smith, in command of the flight, flew on S.1263, with Fl.-Lieut. Maxton as captain of the boat. Squadron Leader J. H. O. Jones, who was at that time acting in command of the squadron, took charge of boat S.1264. There were seven men in all on each boat. Among them was Flying Officer C. Ryley, who had actually gone down under water in the disastrous crash of the third Iris belonging to the squadron. Ryley was in the forward gun cockpit in the nose of the machine, and his hand got caught in the gun ring. He wrenched it free under water, and his life-saving jacket brought him up to the surface. One would have imagined that most men would have been a bit nerve-wracked after such an experience as that, but Ryley's nerves were quite unshaken. Had he not been quite fit, he would certainly not have been selected for this Mediterranean cruise.

The all-up weight of each boat when it took off was computed to be about 31,000 lbs. The flight to Hourtin Lake, near Bordeaux, was 393 sea miles, and was made in seven flying hours. The crews of the British squadron were most hospitably entertained by the officers and men of the French seaplane station. The massive, long-range Iris boats aroused great admiration in the French officers. They themselves work mainly from inland waters, and for such work they said that their lighter boats were sufficiently good. Great Britain, they concluded, was forced by her geographical position to develop the large, powerful, flying boat. Next day, the 24th, the squadron flew on to Etang de Berre, an inland lake near Marseilles. They crossed France to the north of the Pyrenees, following the line of the River Garonne. They calculated that in case of

need they could have made a safe landing on the river up as far as Toulouse. After that they had to trust to their engines, and all went well. At Berre they were very kindly received by Capt. de Corvette Jean Amanrich, commanding the station, and his officers. The French Schneider team is training on Berre Lake. The two Calcutta flying boats bought by the French Navy from Short Brothers, Ltd., are stationed at Berre, and the French pilots are loud in their praise of them.

Next morning, March 31, the Chief of the Air Staff, Air Chief-Marshal Sir John Salmond, arrived very early by train at Marseilles, and at once went aboard an Iris. The squadron took off at 7.55 a.m. from Berre Lake, and after 7 hrs. 45 mins. flying arrived at Calafra station in Malta. This flight covered 642 sea miles, and, had contrary winds been encountered, the fuel would not have held out. It was, in fact, reckoned too long a stage for present-day flying boats; and, as the wind on the return journey was likely to be against them, it was decided to come back by shorter stages via Greece and Italy. On April 1 the squadron flew to Sollum, 605 sea miles. They took off at 6.25 a.m. and landed at 1.10 p.m., a flight of 6 hrs. 45 mins. While they were in the air Sir John Salmond was informed by wireless of the collision between H.M.S.

"Glorious" and a French liner. Also, an oil leak developed in the starboard engine of S.1263. It proved afterwards to be due to a cracked crankcase. However, the engine kept running without undue protest, and Sollum was safely reached. There Sir John Salmond went ashore and proceeded by landplane to inspect the stations in the Middle East Command.

On April 3 the squadron flew on to Aboukir. Two engines had previously been sent on ahead to Gibraltar as spares for the cruise with the Mediterranean Fleet, which had been cancelled. These had been urgently sent for, but no trace of them could be found when the squadron arrived at Aboukir. The R.A.F. workshops there attempted to repair the damaged engine by riveting plates on to the crankcase, but oil continued to escape. The boat had to wait at Aboukir until a spare engine arrived and was installed.

While the boats remained at Aboukir, Wing Commander S. Smith was summoned to Cairo to confer with the Chief of the Air Staff. He flew there in a Fairey III F and returned next day to Aboukir in a "Victoria." The same Victoria was used to take the officers of the squadron up to Cairo for a day.

On April 9 the Wing Commander took the other Iris, S.1264, from Aboukir to Lake Timsah, on the Suez Canal. The air was a bit thin over the lake, but a safe landing was made, and on a test flight the Iris took off with 600 gallons in her tanks after a run of 40 seconds. Sir John Salmond arrived and went on board that afternoon, and the next morning he flew off for Crete. The Wing Commander returned to Aboukir and rejoined the other Iris, which had now got its new engine installed. On April 11 S.1263 set off in pursuit of her consort, and reached Mirabella Bay, Crete, but had to stay the night there. Next day, the Wing Commander's boat reached Athens, flying through very rough weather, and found the other Iris still at her moorings. Sir John Salmond, however, got away, and the refuelling of the other boat took so long that she could not leave that night. Next day the Wing Commander's boat followed, crossing Italy from the Gulf of Taranto. There were high mountains on each side, and the bed of the river below was almost dry, so the Iris climbed to 4,000 feet. She safely reached Naples at 12.15 p.m. The Greek and Italian officers showed the warmest hospitality to their British guests. On the 14th the boat reached Berre again, landing in a

mistral, and moored beside her consort which had already landed the Chief of the Air Staff, Sir John Salmond, who returned to London by train. The boats were overhauled at Berre, staying there till the 18th, when they flew to Hourtin. They hoped to get home on the 19th, but when flying up the coast of France they received a gale warning. The Wing Commander decided that the best thing to do was to land in the Loire at St. Nazaire. There the other boat, S.1264, had engine trouble, and had to be left behind until two engines had been changed. S.1263 returned on April 22 to Mount Batten, after having flown about 4,800 sea miles on this cruise. The other Iris returned later.

This article would not be complete without a brief allusion to how an Iris in flight impresses a passenger. The inside of the boat is most remarkable. It is fitted up with everything necessary to make her self-contained, anchor, collapsible boat, foghorn, sleeping bunks, cooking stove, decanter locker, and, in fact, everything one would look for in a well-found yacht. In the air the Iris is steady, roomy and comfortable. Flying along the picturesque Devon coast is a most delightful experience, and one gets an excellent view from a seat between the two pilots. Wing Commander Burling finished a most enjoyable little flight by putting his boat down gently in the Sound at a speed of no more than 41 knots.

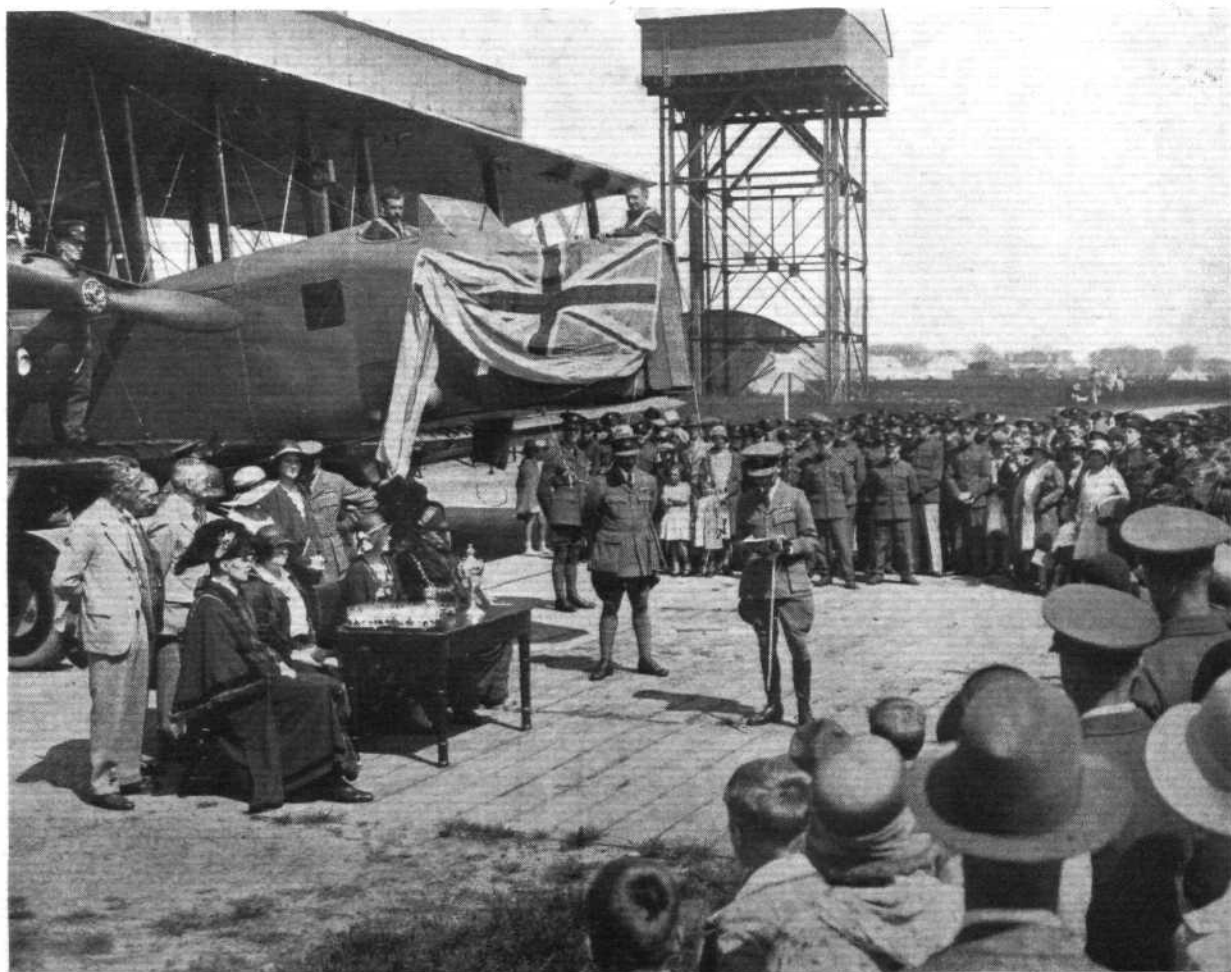
## THE R.A.F. DISPLAY

SOME details have now been made public of the features of the Royal Air Force Display which will be held at Hendon on Saturday, June 27. There are several features of unusual interest. Prominent among them will be the catapulting of a "Virginia" night bomber, weighing over eight tons, into the air after a run of only 100 feet by means of compressed-air engines which develop 4,000 horse power for a space of three seconds. This is an amazing sight, and would be enough by itself to justify a pilgrimage from any part of the country to Hendon aerodrome. Another novelty in this country is a demonstration of refuelling one machine from another in the air. This operation has often been carried out in America, and some time ago the Air Ministry had some experiments made; but as at the time there seemed no particular need for re-fuelling in the air, the matter was dropped. The development of the large flying boat has brought it up again. Heavily loaded boats do not easily "come unstuck," and there would be a distinct advantage in getting a boat into the air before filling up its petrol tanks. At the Display, the experiment will be carried out with two landplanes, and the tanker machine will be automatically kept on a straight course by means of gyro-

scopic control. The pipe by which the petrol is fed from one tank to the other is provided with an automatic cock, which closes in the event of contact between the two machines being accidentally broken, thus preventing waste of petrol and danger of fire.

Scarcely, if at all, less interesting to the student of air tactics will be the appearance of a whole wing of fighter machines (Nos. 3, 17 and 54 F.S.) all flying the "Bulldog" aeroplane. This fighter Wing will carry out combined manoeuvres with a bomber Wing composed of three Auxiliary Air Force squadrons (the City of London, the County of London, and the County of Middlesex) all mounted in "Wapitis." Hendon has never before witnessed a whole A.A.F. Wing in the air before.

Then a flight of No. 43 (Fighter) Squadron will show off the paces of the new interceptor fighter, the "Fury." One feels almost inclined to write that when you have seen the "Fury" you do not need to go to the Schneider, so great is the impression of speed given by this grand aeroplane. And as for climb, it would probably make a good race with one of Mr. Brock's sky rockets. The usual events, crazy flying, parachute drops and aerobatics with coloured smoke, etc., will doubtless be as attractive as ever.



No. 500 (County of Kent) (Bomber) Squadron.

The first "Virginia" of the new Cadre Squadron at Manston was christened "Isle of Thanet" by the Mayors of Margate and Ramsgate on June 4.



# BREDA DEVELOPMENTS

## Improved View Afforded by Inverted Engine

OUR readers are already familiar with the Italian light plane produced by the Societa Italiana Ernesto Breda, of Milan, for we not only described one of these machines in our issue of May 9, 1929, and subsequently, but the Breda 15 has also been seen at various aviation meetings in this country. As we have had occasion to remark previously, the construction—as, in fact, is the case with most Italian aircraft—of the Breda machines is particularly robust, and we understand that every part has been tested under the same conditions which apply to Service machines produced by this firm.

The performance of the Breda light planes is also exceptionally good—it may be remembered that the Breda 15-S won the second highest place in the International Challenge competition last year, attaining 87 points when the highest number of points secured was 88. The same type of machine, piloted by Col. Sacchi, won last year's Circuit of Italy.

We think, therefore, the following notes regarding recent developments announced by the Breda Company may be of interest. In the first place, a noteworthy modification in the Breda 15 has been introduced by the fitting of an inverted engine, whereby the view forward—which it must be admitted was not, previously, particularly good—has been considerably improved.

It may be noted here that the engine fitted in the machine illustrated is the 110 h.p. "Argus A.S. 8," but

the inverted D.H. "Gipsy" engine is also being fitted in other models, while the inverted "Cirrus Hermes" is another make which will possibly be installed. D.H. "Gipsy III" engines are now being fitted to the Breda 15-S land planes.

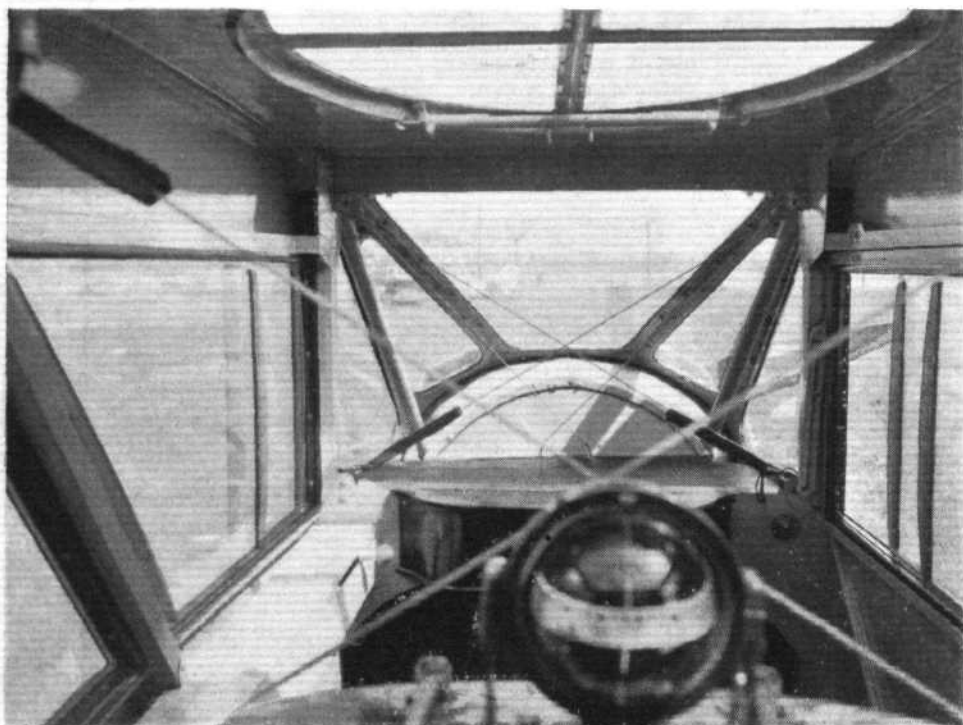
Some Breda 15-S type machines—fitted, we believe, with Bristol engines—have been entered for this year's Circuit of Italy Contest. We understand the Breda Company are quite busy just now—100 type 15 seaplanes are being produced for Italian Clubs, and 70 type 15-S land planes (with 90-100 h.p. Fiat A.50 engines) are also in hand. The construction (under licence) of the Breda light planes in this country is also, we are informed, receiving consideration, and, in this respect, should any of our readers be interested in such an undertaking, we will be pleased to put them into touch with the Breda Company's representative in this country.

In conclusion, we give the principal characteristics of the "15" and "15-S":—

*Breda 15.*—Span, 36 ft. 6 in. Length, 22 ft. Height, 8 ft. 3 in. Wing area, 214.3 sq. ft. Weight, empty, 926 lb. Total weight, 1,543.5 lb. Speed range, 34-112 m.p.h. Climb to 2,280 ft., 8 min. Service ceiling, 14,100 ft.

*Breda 15-S.*—Span, 35 ft. 6 in. Length, 22 ft. Height, 7 ft. Wing area, 193.6 sq. ft. Weight, empty, 1,036 lb. Total weight, 1,742 lb. Speed range, 34-130 m.p.h. Climb to 16,400 ft., 35 min. Service ceiling, 21,300 ft.

The Breda Company, it may be added in conclusion, also produce other types of aircraft in addition to the above light planes, including various types of Service land and sea planes.



**BREDA DEVELOPMENTS:** Our illustrations show two views of the new Breda "15" light monoplane, fitted with a 110 h.p. "Argus A.S.8" inverted engine. The installation of an inverted engine in this machine has been the means of considerably improving the view forward from the cabin—as may be gathered from the top illustration, showing an interior view from the rear seat. We understand that the inverted D.H. "Gipsy" and "Cirrus Hermes" engines will also be fitted in the "15-S" machines.



# Private Flying & Club News

## THE "F.A.N." MEETING AT ORLY



**THE ORLY MEETING:** On the left, some of the Heston Tourists being received by M. Jaques Breguet (hat in hand); on the right, Miss Winifred Spooner in the "Puss Moth" who also paid a visit to Orly.

**P**RELIMINARY to their three days' Convention, the Associated Aero Clubs of France (known as the *Fédération Aéronautique Nationale*) invited the members of the various provincial clubs to fly to Paris for the Convention and meet at the Orly Airport on Sunday morning, May 31 last. A demonstration of the latest models of the various tourist planes also took place at the airport that afternoon. A large number of machines from all parts of France responded, and some 56 machines were grouped at the Orly Airport during the day. The Aero Clubs of Vichy, Tours, Bourges, Dieppe, Le Havre and l'Aisne, amongst others, sent representatives, while a number of private owners also arrived in their planes. The Aero Club of France acted as host and a very pleasant luncheon was served in one of the hangars, while a "tea" was held late in the afternoon after the various demonstrations.

M. Rudolph Soreau, President of the French Associated Aero Clubs and a Vice-President of the Aero Club of

France, presided; he was assisted by M. Edward Avenet, as Commissioner-General, and M. Henry Chollat, as Secretary-General, of the Meeting. The Air Minister was represented by Admiral Esteva, Chief of the Naval Air Service, and M. Etienne Riche, the Assistant Air Minister, by M. August Renvoise, the Director of the Paris District Airports.

The members of the "Heston Air Park Association," who were returning to England after having accomplished their "Spring Cruise" (which was described in last week's issue of *FLIGHT*), were also guests of their French Aero Club friends at this very pleasant reunion.

Miss Winifred Spooner also stopped at Orly Sunday morning, on her way back to England from the Aviation Meeting at Zabreb, Yugo Slavia. She was piloting a "Puss Moss," having left Marseilles earlier in the day, and had Mr. Lindsay Everard as a passenger.

About 11.30 o'clock all the Club members of the meeting repaired to the monument recently erected in the Orly



**NEW TYPES AT ORLY:** The Couzinet 3-engined postal plane (40 h.p. Salmson) is seen on the left, and on the right is the Albert 2-seater low-wing monoplane, with 85 h.p. Walter engine.



grounds by the Union des Pilotes Civils to the civilian pilots who have lost their lives while flying. A moment's silence was then observed in memory of the airmen Marcel Lalouette and Jean de Permangle, who were killed in the sad accident off Barcelona, Spain, the day before. After having had a "glass of porto" in one of the rooms of the Airport Building and hearing a few farewell words from M. Soreau, who, amongst other things, congratulated the English "aviatrices" on being such good pilots, the Heston Tourists, with the exception of Mr. and Mrs. Vereker, who intended remaining a few days in Paris, "took off" for Le Touquet, where they were to lunch, and then fly over to England. They all declared themselves as delighted with the "Cruise," and left a most cordial invitation with their French Aero Club friends to make them a return visit to Heston on July 12 next.

Mr. Fuller has already begun to arrange the details of this tour, and it is expected that quite a squadron of French Tourist planes will fly across the Channel that day.

In the "Presentation of New Models" that followed in the afternoon, the Couzinet Co. exhibited their tri-motor, low wing, monoplane, which was piloted by Captain Carretier. He made a flight round the aerodrome, the plane handling very easily, and had as his passengers MM. Renvoise, the Regional Director of the Paris Airports, and Florentin, the Commandant of the Orly Aerodrome.

This Couzinet plane is equipped with three Salmson 40-h.p. motors, and is intended for light postal service. Edmond Albert, the constructor-pilot, exhibited his two-seater, open cockpit, low wing monoplane (85-h.p. Walter), which he flew himself to good advantage. Lucien Delmotte piloted a new Caudron 272, a two-seater open cockpit biplane fitted with folding wings, and which is equipped with either a 95-h.p. Renault or Salmson motor. It is claimed to be lighter and faster than the well-known Caudron type 230 plane, and is very comfortable. De Vercruysse presented his diminutive two-seater Mauboussin cabin monoplane, with which he won the landing and "take off" competitions in the "Tour of France" Meeting. The Morane-Saulnier, Blériot and Farman Companies also exhibited their latest planes.

The Meeting closed with a "tea" given by the Aero Club de France in the Roland Garros hangar, where the Club's tourist planes are garaged. It was presided over by Mlle. Susanne Deutsche de la Meurthe, who arrived in her new Nieuport four-seater cabin monoplane, *Icare III*, equipped with a 230-h.p. Lorraine engine and piloted by Ferdinand Lasne.

There was a large attendance at the Meeting from all over France, and every indication of a constant and developing interest in Tourist Aviation.

R. C. W.

## THE BROOKLANDS MEETING



**INFORMATION:** Visiting machines at Brooklands neatly parked by the A.A. (Flight Photo.)

The Meeting organised by Brooklands Aviation and the Brookland Aero Club on June 6 was exceptionally well-attended, and was one of the most popular events of the year

**A**IRCRAFT, more aircraft, and still more aircraft! Brooklands gathered unto itself something like 100 aeroplanes of various types on Saturday last, although there were meetings on the same day both at Cleethorpes and Hanworth. When one comes to think of it, the growth of private flying is really extraordinary. A year ago 100 aircraft at a meeting (even in the King's Cup Race) seemed an enormous number. Yet to-day, even with meetings on the same day in other parts of the country, we get this number of machines. A very short while ago it was possible for one member of the staff to keep in touch with all meetings and aspects of private and club flying. Now even four hard-working members are hardly able to represent FLIGHT personally everywhere.

The Brooklands meeting naturally attracted a large crowd of spectators, as the committee responsible had fully advertised the show beforehand. The harvest reaped at the gates was proof of the value of advance advertising.

The meeting was opened by Lord Amulree, Secretary of State for Air, who eulogised club flying in general and Brooklands in particular. A considerable number of people of note were present, including Col. Sheldermine, Director of Civil Aviation, some members of both Houses of Parliament, and representatives of the International Commission on Air Navigation. M. Blériot was flown over from Hanworth in a Desoutter monoplane, and was intro-

duced to Lord Amulree. We also had the pleasure of a short chat with Mr. Al. Williams, the famous American pilot, whose efforts, in the face of great difficulties, to get a machine into the Schneider Trophy competition have been so consistent and praiseworthy.

The meeting opened with the flying of some models by members of the S.M.A.E., a branch of aviation which is evidently growing rapidly. A fly-past of various types gave the spectators a good idea of what the different types look like in the air, while some of their several points were explained through the microphone by Captain E. A. Jones and Mr. E. C. Brown.

The Autogiro was flown by Mr. Brie, and, while he certainly made a couple of excellent slow landings, we would suggest that in future it would be better if he concentrated even more on demonstrating those special capabilities of this machine not possessed by other aircraft, and did less of the evolutions, such as steeply-banked turns, etc., which other types of aircraft are designed for and do rather better. This is not meant to infer that the Autogiro cannot do these things. It can. But such manoeuvres are far from being the main functions of an Autogiro.

A formation of three Moths, in which G. Lowdell and S. A. Thorn were led by K. G. Murray, gave some of the prettiest flying by a club formation we have ever seen. Although the machines were only Moths, they carried out all the evolutions which one associates with high-power

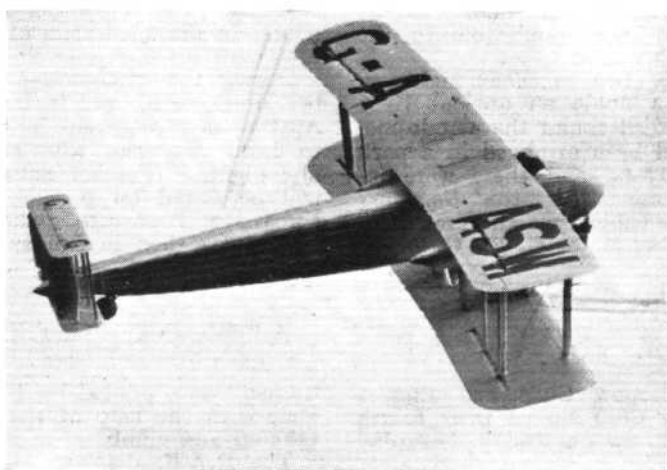


**THE "STAR TURN":** The Hawker "Fury" (Rolls-Royce "Kestrel") was demonstrated in masterly fashion at Brooklands by Mr. Sayer, Hawker's Test Pilot. (FLIGHT Photo.)

single-seaters, such as loops in vee formation and in line ahead, vee formations with the leader inverted, and last, but not least, an excellent "Prince of Wales Feathers."

A Gipsy III Puss Moth was flown by Captain H. Broad, a Westland "Wessex" (3 Genet Majors) by Mr. Penrose and an Avro Avian (Hermes II) by Mr. Thorn.

Aerobic displays were given first by Mr. P. E. G. Sayer on the Hawker Fury (Rolls-Royce Kestrel II), and later by Mr. Leech on the Southern Martlet (Genet II).



**THE HEAVY STUFF:** Although a freight carrier, the Vickers "Vellore" (2 "Jupiters") was looped and generally stunted by Mr. Summers at the Brooklands Meeting.

(FLIGHT Photo.)

Mr. Sayer left one in no doubt as to the speed of the Fury, and some of his dives were really terrific. This is just the sort of machine on which a spectacular aerobic display should be given, provided the announcer gives a fair explanation of the advantages which a high performance single-seater fighter has for such manoeuvres.

The display by Mr. Leech was in a different category, inasmuch as his Martlet was not a service machine, and is, in fact, the only British single-seater built with manoeuvrability, as is its *raison d'être*. He showed that the designer has left nothing to be desired in the result he has obtained, and for its low power the Martlet must be one of the finest machines for aerobic training that there is. His slow rolls off the ground were beautifully executed, as were such things as a bunt and subsequent half-roll.

The weather and the indisposition of Mr.

**THE MAN WITH THE GUN:** Left, Captain Davies signals the start of an event. Right, A worm's eye view of Lowe Wylde on his glider. (FLIGHT Photos.)





FLIGHT to need much comment, but for the benefit of those who may not have read previous reports of his displays, we may say that there is no better club-trained pilot at this sort of flying in the country, and probably not in the world.

A humorous event was given by Mr. Lowdell, one of the Club's instructors, he being a supposedly semi-lunatic who runs out on to the aerodrome and takes off in a machine. The helpful attitude of the local police force who joined in the game and fell on Mr. Lowdell when he eventually returned to earth materially added to the humour of the turn!

Mr. Summers then demonstrated the Vickers Vellore. For the benefit of those who may not know, we may say that this machine is a large twin-engined freight carrier and its demonstration took the form of aerobatics! Just what is the value of such a demonstration is a little difficult to see. The Vellore is a freight carrier of considerable value for its job, and as such has its own peculiar advantages for that job. By the machine being stunted, none of these advantages were shown off at all. We hope that in future a little more effort will be made to stage a demonstration more applicable to the type of aircraft.

Mr. Lowe Wyld made one or two excellent flights in his auto-towed glider, and as a finale an ancient Benz dog cart was bombed as it trundled round the aerodrome.

The main mass of aircraft had been arranged in a park up towards the old school hangars, and these were inspected to determine the winners of the *Concours D'Elegance*. In machines of the cabin type the first three were Puss Moths, the winner being Major G. W. G. Allen,



HOW THE AERIAL VISITORS SAW IT: A snap of Brooklands from above during Saturday's Meeting, taken by Mr. Ivor McClure.

of Oxford, and the other two Messrs. Parker and Davenport. In the open class of machines Mr. W. Handley was first with his Gipsy Moth G-AALT.

During the afternoon Mr. Scott arrived in his record-breaking Moth, which bore signs of hard flying, and Australian registration letters. Mr. Scott was introduced to Lord Amulree, who congratulated him on his very fine flights. (Further details of Mr. Scott's return flight will be found on p. 522.) Afterwards Mr. Scott flew across to Hanworth, where the Parliamentary Garden Party was then in full swing.

## THE PAGEANT AT RENFREW

IN conjunction with the Glasgow Civic and Empire Week, the Scottish Flying Club staged their fourth annual Air Pageant at Renfrew on Friday, Saturday and Sunday last, June 5, 6 and 7.

This was the most ambitious aerial display ever organised in Scotland, and with the assistance of Service Units, No. 100 T.B. Squadron from Donibristle, O.C., Squadron-Leader Croke; a flight of "Flycatchers," O.C., Squadron-Leader Lees from F.T. base, Leuchars; Nos. 602 and 603 B. Squadrons; City of Glasgow and City of Edinburgh Squadrons, Auxiliary Air Force, commanded by Squadron-Leaders The Marquis of Douglas and Clydesdale and Murray-Philipson, respectively, and Squadron-Leader Noakes doing crazy flying on a service Gipsy Moth, only required reasonable weather to be an outstanding success.

Friday opened with some rain, much cloud and a fresh breeze. The day, however, was mainly fair, though very cold, and the wind steadily increased and during the afternoon programme was blowing 35 m.p.h. on the ground and about 45 m.p.h. at 1,000 ft. These conditions showed the Autogiro to advantage, and Mr. Rawson gave a very convincing display, drifting backwards across the aerodrome without loss of height and hanging stationary. Shortly before he landed he carried out an evolution which he afterwards described as a "half roll," and, whatever it was, it certainly provided the thrill of the afternoon for most of the pilots present. The hearts of many well-known and experienced pilots missed several beats. His landing, made, he assured me, at 32 m.p.h. air speed, was quite impressive, as, instead of running forward, or even standing still, the machine was quite obviously trying to run backwards and using its tail skid as a sprag.

Mr. George Murray, of Edinburgh, in his Gipsy Moth, put up his usual polished exhibition of aerobatics, his upward spins, and inverted loop, climb and beautifully banked turns being particularly impressive. The Lord Provost Kelly, together with many of the local bailies, went for flights over the city in the Imperial Airways H.P., piloted by the genial Captain Fielden, while the

Clerget Avro, piloted by Mr. Lawson, was kept very busy, and, with the help of the wind, rivalled the Autogiro in take-off and climb.

The R.A.F. display was carried out with that superb skill and polish which one has come to expect from all service squadrons, fighter and bomber alike. The three Flycatchers, piloted by F.O's. Hood, Purves and Fletcher, put up a really wonderful show in the strong and bumpy wind; their loops in tight vee formation, upward spins and slow rolls were most impressive, and they kept station with marvellous precision while doing loops and Emmelman's in line ahead.

The formation of bombers, both regular and auxiliary, kept station extremely well and dived on the aerodrome in a most impressive manner. It was a pity, however, that they changed formation when so far away from the aerodrome that it was practically impossible to follow the manoeuvre.

Squadron-Leader Noakes gave the display of crazy flying that one expects from the originator of this art; watching him, one would think that the laws of gravitation and aerodynamics had been temporarily suspended.

Captain J. C. Houston, M.C., chief instructor to the Scottish Flying Club, gave a particularly fine display of balloon-bursting in one of the club Moths. He burst all the balloons, many at the first attempt, showing marvellous judgment and extremely accurate flying under difficult weather conditions.

Saturday was literally a "wash-out." The heavens opened and the rain fell without ceasing during Friday night and all day Saturday. The aerodrome was inches deep in water, and, except for a few joyrides (?) in the evening in the H.P. and Avro, no flying was done. In one hangar a machine park had been arranged, there being Moth, Avro Lynx, Fairey Flycatcher and 3F., Horsley Torpedo Bomber and Wapiti machines, as well as two gliders from the Glasgow Gliding Club. The Curtiss Wind Tunnel, lent by Messrs. Shell, did a roaring trade all day, old and young trying their skill at "flying" the machine.

The weather was most unfortunate, as the 602 Squadron was holding an "at home" at the Aerodrome that day, and the guests had to roam about the hangars trying to avoid the wet and cold. So great was the enthusiasm of the local public, however, that several hundred people were present. After consultation, Wing Commander Park decided very sportingly to give the show originally arranged for the Saturday on the Sunday.

The weather on Sunday, while by no means ideal, was fit for flying, and the programme was carried out in its entirety, including the parachute drop which had been cancelled on the other days because of the wind. There was a big crowd, some 25,000 people being present in the afternoon, and about 700 cars. One feature of the joy-riding business which somewhat surprised one was the big demand for stunt flights in the Avro and Club Moths, piloted by Capt. Houston and Messrs. Steel, Wren, and Walker. The Bootleg show was a great success, and was carried through with great gusto, the gangsters (Messrs. Jackie Robertson and Sandy Wren) showing great abandon, and accumulating considerable quantities of mud and water on their persons when they fell wounded on the sodden and flooded aerodrome under the fire of the speed cops, Messrs. George Walker and Scott Brown.

Capt. D. I. M. Kennard, of Fairlie, arrived in his black Klemm, and received the hearty congratulations of his fellow club members on his recent racing success.

Messrs. Pratt's Avian, piloted by Mr. Taylor, and the Shell Avian, piloted by Mr. S. K. Watson, were present, as also were Messrs. A. F. Wallace and H. Leeson in Gipsy Moths.

A source of great interest to all present was the Puss Moth, the property of Messrs. Lewis and Barnard, ably demonstrated by the pilot, Mr. W. Gairdner. On the Sunday, particularly, this machine, with its small ground clearance, resembled a flying boat more than an aeroplane as it took off, almost entirely hidden in clouds of spray.

The Ladies' Committee of the Scottish Flying Club had a restaurant running at full power in the club hangar, and, together with the bar, did a roaring trade, particularly on the Saturday, when they were the only places at all comfortable.

It is understood that many of the visitors were at a convivial little party in the Central Station Hotel, Glasgow, on the Saturday evening.

The Blackburn Bluebird, of Messrs. Auto Aero, Ltd., the Scottish agents, gave demonstration flights, piloted by Mr. George Walker.

**HULL AIR PAGEANT.**—On Sunday last, June 7, National Flying Services organised an Air Pageant at Hull. The meeting attracted a large number of visitors, some 20,000 entering the aerodrome, while it is estimated that at least as many contented themselves with "hedge tickets" outside. After all the outcry against Sunday meetings, this is rather a significant attendance. The Pageant was opened by Sir Alan Cobham, and among those who arrived by air was Col. the Master of Sempill and Miss Amy Johnson. The arrival competition held in connection with the Pageant was won by Fl.-Lieut. Stainforth on a Spartan. Aerobatics displays were given by Mr. George Murray on a Moth, and by Flying Officer Johnson on a Blackburn Lincock. A Civilian Coupé was demonstrated by Flying Officer Leech. Captain McKenzie, who is pilot-in-charge at Hull, made a parachute descent.

**LINCOLNSHIRE AERO CLUB.**—The meeting planned for Cleethorpes on Saturday last, June 6, had to be cancelled. The weather was such that visibility was practically nil, so that visiting machines were not able to get through. The club hopes to hold the proposed meeting later in the season, and a definite date is likely to be announced shortly.

**A BLACKPOOL PAGEANT.**—On July 8, N.F.S., in co-operation with the Blackpool Corporation, are holding a Pageant at Stanley Park, in the course of which there will be an Open Handicap Race from Hanworth to Blackpool, non-stop, open to any type of aeroplane and any pilot. The handicapping will be done by Captain

Dancy and Mr. Rowarth (which is to say it will be good!), and the start from Hanworth will begin at 2 p.m. The First Prize will be a Gold Trophy, value £60, which is to be won outright. A Second Prize of £30 and a Third Prize of £20 are also offered.

**THE HAMPSHIRE AEROPLANE CLUB.**—Although, in common with many others Clubs, this Club's flying hours have suffered owing to the indifferent weather this year, they have now reached a total of over 700 hours, and, with three members qualifying for their "A" licence during May, they are now assured of receiving our full £2,000 Subsidy for the current period.

The Club was highly honoured on May 26, when the Prince of Wales landed at Hamble on the occasion of his visit to the "Empress of Britain," and, in conversation with officials, showed a keen interest in the progress of the Club.

The Landing Competition, held on May 31, was won by Lt.-Comdr. P. V. James, R.N., at his first attempt. This is the fifth of these competitions held, and the general standard of approaching and landing showed a distinct improvement on anything hitherto.

**CINQUE PORTS FLYING CLUB.**—Weather stopped flying on Friday and Saturday of last week, and it was unfortunate that owing to the very bad weather on Friday evening there were very few members at Lympne to welcome Mr. Scott on his arrival from Australia, after his magnificent double record breaking flight, which is surely the finest solo performance yet accomplished in aviation.

On Tuesday, June 2, Lt.-Comdr. G. G. Slade, R.N., of Etchingham, Sussex, passed all his tests for "A" licence, and he was followed on Thursday, June 4, by Mr. W. J. Macdougald, of the Queen's Own Cameron Highlanders, the former taking 9 hrs. 45 mins. dual instruction and the latter 10 hrs. 15 mins.

The Ashwell-Cooke Competition for June, which should have been flown on Sunday, June 7, was postponed owing to the fact that the cloud refused to lift above 400 feet or so, and will be flown off, weather permitting, on Sunday next, the 14th.



**A Group of Members of the Reading Aero Club.**—From left to right, Mrs. S. Cliff, Mr. S. Cliff (a pilot of Phillips & Powis, Ltd.), Miss Spicer, Miss Gower (daughter of Sir Robert Gower, M.P.), Mr. Lawn (an Instructor), and Mrs. Powis.



## CORRESPONDENCE

[The Editor does not hold himself responsible for opinions expressed by correspondents. The names and addresses of the writers, not necessarily for publication, must in all cases accompany letters intended for insertion in these columns.]

## THIS "OBEY" STUFF

[2744] I am becoming a little muddled in my thoughts as a result of reading letters headed "I will obey," and "Who will obey what?" but I think some of your correspondents are more muddled still.

A certain "Dædalus" began clearly enough by saying that some pilots fly carelessly, and suggested as a remedy the formation of a British Rumble Club. Sandy McTavish followed this up with the gesture of offering two guineas for a practical work-out of the scheme. With Scottish acumen he appears to have guessed that his money was safe. Dædalus then contributed a letter, and very little else, dragging the horse to the water again, and I certainly thought that was that. Not at all.

After three and a-half months the idea had penetrated through the perceptive faculties of a gentleman who signed himself "Per Ardua ad Infinitum." The stuff that came out the other side filled me with admiration at the aptitude of the signature. I think he wanted to know whether there was anybody in aviation who could, who wanted to, and who proposed to do anything. Via scenic railways, the Eiffel Tower, camels, and needles, his letter finished up in the Kingdom of Heaven, where, poor man, he may perhaps ultimately rejoin it, or, if a rich man, perhaps not. He did, however, in the following number, bring "Hornet" about our ears.

In his letter Hornet touched on the subject under review. You have got to hand him that. He wrote: "The Royal Aero Club should employ someone to be continually visiting aerodromes and private owners to find out their difficulties and matters of interest, and to take action in cases of dangerous flying, otherwise, in time, the Air Ministry will take action which will mean more laws and regulations." The italics are not his.

If I judge rightly by his letter, Hornet has his nest in the Royal Aero Club, and I wonder how they like it. "The Royal Aero Club should employ someone . . ." certainly they should. It would go very well with Hornet's other suggestion that "The Royal Aero Club should form a branch or association for amateur pilots with a full-time staff to look after their requirements . . ." (Again the italics are not his.) Well, there are going to be a whole heap of swell jobs going, you can see that. The Royal Aero Club are apparently not doing what they should, because they have not got the staff, and because, being a club, they must have social distinction. I have to laugh.

What is the situation? The Automobile Association, which Hornet pats on the back, is doing the very things that Hornet wants the Royal Aero Club to employ someone to do. The A.A. is a centre of information and advice on matters pertaining to aeronautics, is a representative body in Aviation that actively looks after the interests of private owners with whom it is continually and closely in touch. It is not a social club and is open to anybody, male or female, on payment of a small annual subscription. That is what Hornet says he wants. If the A.A. is bungling its job, then the Royal Aero Club, or anybody else, can form a body to do better. But if the A.A. is old enough and big enough to give a real live service to Aviation without having to put in a short step, then we should be grateful, and so should the Royal Aero Club, because it can save its money for other things.

But it drives me to drink trying to figure out how this is going to make pilots fly more safely. If bodies, social or working, that keep from filing their schedules by the subscriptions of their members are going to put their members across their knees and spank them when they are naughty, then it's a World Revolution. If you don't believe it, next time a policeman rolls slowly and menacingly towards you, tell him you are going to resign your membership of the United Kingdom of Great Britain and Northern Ireland. Try that. The fellow whom the Royal Aero Club employs to take action in cases of dangerous flying will be a Hornet all right. The business end of the hornet is not in its head, as the Club would find out if it did not know it already.

I like policemen well enough, and I like to read of them rushing around after car thieves and smash-and-grab men, and ferreting for poison in the innards of buried ladies. But when I catch a cop looking my way it gives me acute

spiritual discomfort. If I felt towards an A.A. Patrol the way I feel towards policemen, I would sue the A.A. for moral damage. If I felt that there was any chance that we should be able to get along without policemen, I would sue Mr. Clynes. Just so long as we misuse our little lives, so long shall we suffer under the Law, and Aviation looks like being part of life for us. Anyway, I don't see how that should worry Hornet, if Swift was right when he wrote: "Laws are like cobwebs, which may catch small flies, but let the wasps and hornets break through."

It is no use accusing me of being erudite, because I got that bit out of the Oxford Dictionary. It has a whole lot of funny things to say about Hornets. In 1802, it says, Mr. Bingley, or it may have been Mrs. Bingley, wrote: "It is chiefly in the hollow trunks of dead trees that Hornets form their nests." Well, now, that doesn't sound awfully good for the Royal Aero Club if they are thinking of growing any new branches. Away back in 1658 a chap named Phillips said about the hornet that it was "a kinde of insect, called in Latin Crabro, which useth to infest horse and other creatures, and is ingendered of the carcasses of dead horses." It's no good flogging those.

I am still giggling, this very minute, over that bit from "Angling" (1880) by F. Francis—"The Hornets have fat bodies dressed after the fashion of the 'Bumble' trout fly." I take it F. Francis knew what he was talking about when he wrote that. Well, maybe I've risen to one, but it did look so good.

London, E.C.2.

JOHN G. CRAMMONT.

May 5, 1931.

## OUR AIRSHIP POLICY

[2745] Your correspondent in to-day's issue of FLIGHT (May 1) seems to imagine that I entirely overlook the fact that we are still in the "experimental stage" of airship work. If he reads my letter again, he will note that I say " . . . if we stop building airships now . . . the lessons of R 101 will have been in vain." Obviously, this means that our designers and engineers must continue with their experimental work before we launch other and larger airships, and in building them the "technical experts" will be able to "get on with their job," remembering the lessons of R 101; and not only those, but the present successes of Dr. Eckener and his Graf Zeppelin.

As for "imperialists, militarists and pessimists," and other (to your correspondent) wild people, in which he includes myself, "interfering," that is nonsense, as our voice is not great enough to be heard in the land of airship construction. Furthermore, the onlookers see most of the game, and we wild people see Germany and America forging ahead with airship work; and on behalf of our country we raise our voice, hoping it will be heard in the land of politicians, and make them get a move on towards putting us in line with other European powers.

Nor do I, personally, regard airships as "pawns of some political game." But on logical grounds: *Ais priori*: Airships are part of our aerial defence and transport. *Ais secundi*: They must be part of the *modus operandi* of international politics. It is no "excess of military zeal" which inspired my letter. It was the realisation of what the next great war will be like, the memory of the last one, and the strides other countries are making in airship construction, and of what our own position will be if, in the next war, our airships are either *non est* or utterly unable to compare with those of the enemy.

Dr. Eckener's "harmonious co-operation" is all very well in time of peace, but the harmony becomes a discord in time of war. All I want to see is "the technical experts" getting on with the job unhampered by a "wait-and-see" Government. I repeat my letter: "Great Britain ranks fifth in air power." Are we wild people, who are citizens of this country, to take that lying down? And who is to do the frustrating?

In conclusion, may I point out that any reflections now cast on those who ordained R 101 to fly—when she did fly—are not appreciated, since some of those in authority perished at Beauvais, in the interests of airship construction and experiment. Let your correspondent ask himself: "Could I have done better?"

MARY KNIGHTLEY.

Golder's Green, London, N.W.11.

May 1, 1931.

# THE ROYAL AIR FORCE

London Gazette, June 2, 1931.

## General Duties Branch

The following are granted short service commns. as Pilot Officers on probation with effect from and with seniority of the dates stated:—F. S. Gardner, R. H. Preller (May 12); W. J. Hickey, E. B. Waddy (May 13); D. G. W. Somerville (May 15). Sub-Lieutenant I. W. Gwynne-Evans, R.N., is granted a temp. commn. as Flying Officer on attachment to R.A.F. (May 20); Pilot Officer on probation M. V. de Satge is confirmed in rank (Feb. 1, 1930); Flying Officer J. Sutherland, M.B.E., is placed on retired list and is permitted to retain the rank of Flight Lieutenant (June 3); Flying Officer U. S. Mackay is transferred to Reserve, Class A (May 30); Flying Officer F. A. R. Bishop resigns his short service commn. (June 3); Pilot Officer H. J. Ward relinquishes his short service commn. on account of ill-health (June 2).

## RESERVE OF AIR FORCE OFFICERS

### General Duties Branch

The following Pilot Officers on probation are confirmed in rank:—E. Cramp (May 15); H. B. G. Michelmores (May 18); J. H. Gladstone (May 19). Pilot Officer F. B. Bristow, of the Special Reserve, is promoted to the rank of Flying Officer (May 13). The following Flying Officers are transferred from Class C to Class A:—C. S. Clarke (May 15); H. C. Johnson (May 20). Flying Officer J. M. H. Hoare is transferred from Class AA (ii) to Class C (Nov. 9, 1930).

## AUXILIARY AIR FORCE

### General Duties Branch

No. 605 (COUNTY OF WARWICK) (BOMBER) SQUADRON.—Flying Officer C. R. Field resigns his commn. (July 7, 1930).

## ROYAL AIR FORCE INTELLIGENCE

**Appointments.**—The following appointments in the Royal Air Force are notified:—

### General Duties Branch

*Air Commodore* A. G. Board, C.M.G., D.S.O., to R.A.F. Depot, Uxbridge, on transfer to Home Establishment; 3.5.31.

*Group Captain* A. S. Barrett, C.M.G., M.C., to No. 1 (Indian) Group, Peshawar, to command; 30.4.31.

*Wing Commanders:* A. L. Gregory, M.B.E., M.C., to No. 7 Sqn., Worthy Down, to command; 26.5.31. A. S. Morris, O.B.E., to Home Aircraft Depot, Henlow, for Engineer duties; 1.6.31.

*Squadron Leaders:* A. H. Stradling, O.B.E., to Elec. and Wireless Sch., Cranwell; 20.4.31. J. H. Sadler, to R.A.F. Base, Calshot; 13.5.31. E. R. Whitehouse, to Central Flying Sch., Wittering; 20.5.31. J. O. Andrews, D.S.O., M.C., to R.A.F. Base, Calshot; 1.6.31. R. H. M. S. Saundby, M.C., D.F.C., A.F.C., to Air Ministry (D.O.I.); 1.6.31. G. S. N. Johnston, to No. 70 Sqn., Hinaidi, Iraq; 15.5.31.

*Flight Lieutenants:* I. E. Brodie, to Air Ministry (D.T.D.); 18.5.31. R. B. Jordan, to Experimental Section, Royal Aircraft Establishment, Farnborough; 18.5.31. G. E. Ranson, to R.A.F. Depot, Uxbridge; 21.5.31. E. H. Rundle, to Station H.Q., Heliopolis, Egypt; 7.5.31. A. L. R. Duke, to No. 29 Sqn., North Weald; 18.5.31. J. T. Paine, to R.A.F. Depot, Uxbridge; 24.4.31. R. H. Haworth-Booth, D.F.C., to R.A.F. Depot, Uxbridge; 11.4.31. E. F. Haylock, to No. 43 Sqn., Tangmere; 17.5.31. R. A. P. Roberts, to Central Flying Sch., Wittering; 19.5.31. J. R. I. Scambler, A.F.C., to No. 16 Sqn., Old Sarum; 20.5.31. H. F. Luck, to R.A.F. Base, Malta; 22.5.31. A. D. H. Foster, to No. 1 Stores Depot, Kidbrooke; 30.5.31. W. R. Day, to H.Q., Fighting Area, Uxbridge; 29.5.31.

*Flying Officers:* C. K. Turner-Hughes to R.A.F. Depot, Uxbridge; 1.5.31. D. J. Hughes-Morgan, to Coast Defence Co-operation Flight, Biggin Hill; 12.5.31. R. V. Griffin, to No. 101 Sqn., Andover; 21.4.31. W. J. P. Sloan to No. 33 Sqn., Bicester; 19.5.31. H. Broadhurst and L. Newcombe, both to R.A.F. Depot, Uxbridge; 13.4.31. F. B. Taylor, to School of Balloon Training, Rolleston Camp; 13.5.31. J. R. Mathews, to No. 27 Sqn., Kohat, India; 27.4.31. P. J. J. Cullinan, to No. 7 Sqn., Worthy

Down; 18.5.31. D. J. T. Haynes, to R.A.F. Depot, Uxbridge; 4.5.31. W. F. Murray, to R.A.F. Base, Calshot; 18.5.31. J. F. Tadman, C.C.M., to No. 1 Sch. of Tech. Training (Apprentices), Halton; 27.5.31. W. R. Tope, to R.A.F. Base, Calshot; 27.5.31. A. G. Adnams, to R.A.F. College, Cranwell; 26.5.31. S. R. Ubee, to H.Q., Iraq Command, Hinaidi; 1.5.31. H. L. Messiter, to No. 31 Sqn., Quetta, India; 22.5.31. M. J. Adam, to No. 11 Sqn., Risalpur, India; 28.4.31.

*Pilot Officers:* N. C. Walker, to Station H.Q., Mount Batten; 19.5.31. W. E. Rankin and J. C. S. Proud, both to No. 2 Flying Training Sch., Digby; 12.5.31. F. S. Gardner to No. 3 Flying Training Sch., Grantham, on appointment to a short-service commn.; 12.5.31. W. J. Hickey, to No. 5 Flying Training Sch., Sealand, on appointment to a short-service commn.; 13.5.31. The following are all posted to No. 4 Flying Training Sch., Abu Sueir, Egypt; 22.5.31.—M. Hare, A. J. Hicks, E. S. Macpherson, T. H. L. Nicholls, J. Ramsden, G. G. Sharp-Bolster, D. Sloan, S. W. F. Smyth, A. Threapleton, G. F. Wood, J. A. Nicholson, to No. 60 Sqn., Kohat, India; 28.4.31. A. F. McKenna, to No. 45 Sqn., Helwan, Egypt; 13.5.31.

### Stores Branch

*Flight Lieutenant* C. T. Davis, to Aircraft Park, Lahore, India; 5.5.31. *Flying Officers:* L. Horwood, M.C., to R.A.F. Depot, Uxbridge; 4.4.31. A. J. Howell, to R.A.F. Depot, Aboukir, Egypt; 16.5.31. M. W. Keay, to R.A.F. Depot, Uxbridge; 13.4.31. P. Alderson, to Supply Depot, Sarafand, Transjordan; 7.5.31. A. H. E. Frost, to Aircraft Depot, Karachi, India; 22.5.31. H. A. Wrigley, to Base Transport Section, Iraq; 12.5.31.

### Medical Branch

*Wing Commander* T. S. Rippon, O.B.E., to Central Medical Estab., for duty as President of the Medical Board; 5.6.31.

*Flight Lieutenant* A. S. Burns, to R.A.F. Base, Calshot; 8.6.31.

*Flying Officer* R. N. Kinnison, to Medical Training Depot, Halton, on appointment to a short-service commn.; 12.5.31.

### Dental Branch

*Flying Officer* J. E. Tyrrell, to No. 1 Sch. of Tech. Training (Apprentices), Halton; 28.5.31.

## AIR MINISTRY NOTICES

**AIR MINISTRY NOTICES to Airmen and to Ground Engineers** are now sub-divided in the manner, which was explained in *FLIGHT* for April 17. In view of this rearrangement and also of the increasing size of these notices, these in the future will be published in *FLIGHT* in summarised form only. Readers will thereby be enabled to see readily what each notice is about and if they should desire to do so, to obtain copies of the particular notices which interest them, from the Secretary, Air Ministry, Gwydyr House, Whitehall, London, S.W.1, or from the Automobile Association, Fanum House, New Coventry Street, W.1.; the Royal Aero Club of the United Kingdom, 3, Clifford Street, W.1; National Flying Services, Ltd., Hanworth Park, Middlesex.

### NOTICES TO AIRMEN, SERIES A.

**No. 16 of 1931. The Air Pilot. Volume 1, Great Britain and Ireland. (2nd Impression, 1931.) 934076/29.**

This is a notification that a new impression of Vol. I of the *Air Pilot* incorporating the monthly supplements Nos. 1—16 (September, 1929—December, 1930) is now on sale and obtainable from H.M. Stationery Office, price 12s. 6d. A synopsis of the contents is given, showing the information covered.

**No. 17 of 1931. Schneider Trophy Contest: Practice Flying. (87201/31.)**

A notice on that practice flying for the Schneider Trophy Contest is taking place over the Solent in the area bounded by Calshot Castle, Stone Point, Egypt Point, Brown-down Point and Chilling, and will continue until September 12. Pilots of civil aircraft are warned not to enter this area at an altitude of less than 1,500 ft., unless they are proceeding to or from Calshot or Lea-on-Solent Seaplane Station; if so doing they should encroach as little as possible on the practice area and use the utmost caution. When practice flying is actually in progress, a ground sign in the form of a white cross will be displayed on the end of Calshot Spit and in the north portion of Lea-on-Solent seaplane station. Practising aircraft, if outside the area defined, will never fly at an altitude exceeding 1,000 ft.

**No. 18 of 1931. Use of R.A.F. Air Stations by Civil Aircraft. (68913/30.)**

A notification that pilots of civil aircraft alighting on R.A.F. air stations should pay cash for any charges which are incurred to the accountant officer of the R.A.F. unit, prior to their departure.

**No. 19 of 1931. Examination for Air Navigators' Licences (Second Class). (111131/31.)**

Notification that an examination for second-class Air Navigators' licences will be held in London on June 29-30 and July 1, 1931. Application forms, etc., can be obtained on written application to the Secretary, Air Ministry, C.A.2, Adastral House, London, W.C.2. Formal application to sit, must be received not later than Monday, June 15. Copies of six of the previous examinations can now be obtained from H.M. Stationery Office, price 2s. net. Copies of the examination held in March-April, 1931, will be on sale shortly, price 6d. Further examinations for both first and second-class licences will be held early in October.

**No. 20 of 1931. R.A.F. Display, Hendon. (112404/31.)**

Civil aircraft are hereby prohibited from landing at Hendon during the period June 24-28. They are also warned to keep a look-out for service aircraft taking part in races over a course lying within the area Harrow-on-the-Hill, Elstree, Chipping Barnet, Hornsey, Harrow-on-the-Hill. Stag Lane Aerodrome is suitable for landing of civil aircraft conveying persons by air to the display.

### NOTICES TO GROUND ENGINEERS

**No. 30 of 1931. Examination of applicants for Ground Engineers' Licences (107,244/31)**

In addition to the Boards which will sit as advertised in Notice No. 23 of 1931, there will also be an examining board at the De Havilland Aeronautical Technical School, Stag Lane, on the second Thursday in May and the second Thursday in each month following until further notice. Applications for licences should be made in the usual way to the Secretary, Air Ministry (D.C.A.), Adastral House, Kingsway, W.C.2.

**No. 31 of 1931. Engine Carburettors—Corrosion. (97262/31)**

It has been found that low-grade fuel when in use in carburettors fitted with glycerinated fibrous paper washers, causes deterioration of the washer and corrosion of the adjacent metal. Carburettors using such fuel should, therefore, be dismantled periodically and examined for corrosion, and washers made from glycerinated fibrous paper should be replaced by new washers of oil paper, obtainable from the manufacturers. Red fibre washers may be refitted if in good condition.

**No. 32 of 1931. Blackburn Bluebird Mk. IV Aircraft Radius Rod Eyebolt**

This is a notification that cases have occurred when the eyebolt securing the radius rod to the axle has cracked at the flange. Frequent inspection is therefore necessary and re-designed part No. N.A. 7028 is obtainable from the Blackburn Aeroplane & Motor Co., Brough, E. Yorks.



## MODELS

### THE MODEL AIRCRAFT CLUB (T.M.A.C.)

BY kind permission of Captain G. de Havilland the inaugural meeting of the recently formed 3rd Wing T.M.A.C. (de Havilland Aircraft Works) will be held at Stag Lane Aerodrome, Edgware, on July 4, at 3.30 p.m. Captain de Havilland has kindly agreed to become the Wing Commander.

Permission for a party of 50 members to inspect the Aircraft Works has been obtained. Those who are desirous of taking advantage of this should be at the main entrance gates at 10.45 a.m. prompt; they will be divided into parties and shown around the works by members of the 3rd Wing.

Teas will be provided for members and visitors at 9d. each. Please notify the Hon. Secretary whether you are desirous of visiting the works, and also if you will want tea, not later than Tuesday, June 30, in order to make the necessary arrangements.

*Farrow Shield Competition, 1931.*—Selection of T.M.A.C. team. The Model Aircraft Club (holders) will hold its meeting for this competition at Stag Lane Aerodrome (weather permitting) on Saturday, July 4, at 4 p.m.

Wing Commanders are requested to arrange trials during June in order to nominate three representatives from each wing to form the representative team of T.M.A.C. in the competition.

Fuselage and spar models making the longest duration flights in the trials should be chosen, and from these the team will be selected on the date of the competition. The Farrow Shield is awarded to the team of six (three fuselage and three spar models) scoring the highest aggregate points for duration, hand launched.

*T.M.A.C. Rally.*—In spite of a high wind which made flying somewhat risky, the various wings of the club were well represented at Wimbledon on Saturday, June 6. The original idea was that a general onslaught should be made on records, but unsuitable weather conditions prevented this. Members from the newly formed Reading Wing together with other visitors patiently waited for the wind to abate a little, the proceedings meanwhile being enlivened by a parachute dropping display by Mr. A. T. Willis, whose model soared high into the air and caused a real thrill when the parachute was seen to drop from the model and then open and float gently to earth. Tea was taken by most members either at the Windmill or picnic fashion, but still the high wind persisted and prevented any real stuff being done. One or two models caused some excitement by nose-diving into a neighbouring pond, from whence they were fished out, undamaged, by skilful manipulation of a land line.

*17th Wing T.M.A.C. North-Western Centre.*—A flying meeting was held on the 7th inst. to decide upon the organisation of No. 51 Squadron and to elect the Flight Leaders. The following officers were elected:—"A" Flight, Leader Mr. J. Pearce; "B" Flight, Leader Mr. F. J. Sheldrake; "C" Flight, Leader Mr. A. E. Doodson.

A number of prospective members attended, and were entertained with some good flights. Mr. Pearce's Nimbus gave some greatly improved results as the result of some modifications recently effected.

Mr. Sheldrake's Famosis appeared in great form with a new wing embodying "Clarke Y" sections; the improvement is truly remarkable.

The squadron's standard model "Crusader," specially designed by Wing-Commander Kenworthy, successfully passed its test flights, and will soon be ready for "mass production" by members. Final detailed working drawings are now being prepared by the D.O. staff, and blue prints with material specifications will soon be available at a nominal charge. Hon. Secretary: A. E. Jones, 48, Narcissus Road, West Hampstead, N.W.6.

### SOCIETY OF MODEL AERONAUTICAL ENGINEERS (S.M.A.E.)

*"Flight" Cup Competition.*—The competition for the FLIGHT Cup, which was to have been held on May 23, has been postponed until June 13, on Wimbledon Common.

*The Wakefield Cup Team.*—The team for the Wakefield International Cup Competition was selected after very good flying on Saturday, May 30, and consists of Messrs. Saunders (T.M.A.C.), Bullock (S.M.A.E.), Fry (S.M.A.E.), Kenworthy (T.M.A.C.), and Kimpton (T.M.A.C.).

*Gliding at Sudbury.*—A successful competition for the "M.E." No. 2 Cup for fuselage gliders was held at

Sudbury on May 9. The cup was won by Mr. T. H. Ives, with a spectacular flight of 59 4/5 sec., which also beats the previous record held by Mr. C. J. Burchell. Mr. N. Peters (T.M.A.C.) was second with 47 sec., and Mr. H. J. Davies (T.M.A.C.) third with 37 4/5 sec. After the competition ordinary flying was indulged in.

### THE AIRCRAFT CLUB, HARROGATE, MODEL SECTION

Some good flying took place at the model aeroplane competition meeting of the above club on May 16. The competitions were arranged in three classes, and the results were as follows:—

Class I (competitors under 16).—(1) W. S. Lewson, Warneford "Swift," 10 4/5, 10 2/5, 12 2/5 sec.; (2) Master Loxley, Warneford "Swift," 9 1/5, 5, 9 1/5 sec.; (3) Master Turner, twin-g geared tractor fuselage mono., 5, 3 2/5 sec. Class II (fuselage machines to S.M.A.E. formula).—(1) H. S. Vaughan, triple-g geared tractor mono., 32, 37, 45 4/5 sec.; (2) H. S. Vaughan, twin-g geared tractor mono., 33 1/5 sec. Class III.—(1) H. S. Vaughan, triple-g geared tractor mono., 10 2/5, 40 sec.; (2) R. F. L. Gosling, twin-pusher mono., 30, 27, 29 sec.; (3) Hawthornthwaite, 11 1/5 sec.

The next competition will be held late in August or early September.

### PUBLICATIONS RECEIVED

*Aircraft Mechanics' Handbook.* By I. W. Miller. New York and London. McGraw-Hill Publishing Co., Ltd. Price 10s. net.

*Nickel Alloy Steels: A Summary of Their Properties and Application.* Bureau of Information on Nickel, the Mond Nickel Co., Ltd., Imperial Chemical House, Millbank, London, S.W.1.

*Economic Conditions in Poland (1930).* Report by R. E. Kimens, C.M.G. Department of Overseas Trade. H.M. Stationery Office, Kingsway, London, W.C.2. Price 1s. 6d. net.

### AERONAUTICAL PATENT SPECIFICATIONS

(Abbreviations: Cyl. = cylinder; i.c. = internal combustion; m. = motors. The numbers in brackets are those under which the Specification will be printed and abridged, etc.)

#### APPLIED FOR IN 1930

Published June 11, 1931

- 4,385. O. R. VIGNALE. Aeroplanes. (348,528.)
- 9,149. FAIRLEY AVIATION CO., LTD., and N. MACMILLAN. Controlling surfaces of aeroplanes and the like. (348,788.)
- 10,980. ARMSTRONG WHITWORTH AIRCRAFT, LTD., SIR W. G. WYLIE, H. N. and P. G. CRABBE. Riveting tool. (348,818.)
- 10,981. ARMSTRONG WHITWORTH AIRCRAFT LTD., SIR W. G. WYLIE, H. N. and P. G. CRABBE. Riveting machines. (348,819.)
- 12,278. E. HEINKEL. Launching of flying machines. (348,844.)
- 12,279. E. HEINKEL. Mounting of water planes on flying-machine launching-tracks. (348,845.)
- 13,814. J. QUESETTE. Control-gear for aircraft. (348,865.)
- 14,619. J. SZYDLOWSKI. Two-stroke-cycle air-cooled aircraft motors. (348,874.)
- 17,228. L. A. J. RATEAU, M. A. G. MARGOT-NOBLEMAIRE, and A. J. A. RATEAU. Charging of i.c. engines. (348,908.)
- 18,347. J. F. ZIEGLER. Supporting-planes for aircraft. (348,924.)
- 20,469. H. A. F. SIECK. Flying machines. (348,946.)
- 26,469. SIEMENS & HALSKE AKT.-GES. Diesel motors with radially-arranged cylinders. (348,980.)

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